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SPHERICAL BASIS  
OF  
ASTROLOGY.

TABLE OF HOUSES  
FOR  
LATITUDES  $22^{\circ}$  TO  $60^{\circ}$



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THE  
SPHERICAL BASIS OF ASTROLOGY

A COMPREHENSIVE  
TABLE OF HOUSES

FOR  
LATITUDES  $22^{\circ}$  TO  $60^{\circ}$

*WITH*  
*RATIONAL VIEWS AND SUGGESTIONS, EXPLANATION AND INSTRUCTIONS*  
*CORRECTION OF WRONG METHODS, AND AUXILIARY TABLES*

BY  
JOSEPH G. DALTON

SEVENTH EDITION

Incorporating Tables for Latitudes to  
 $60^{\circ}$ , by the courtesy of the publishers  
of Raphael's TABLES OF HOUSES

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## VIEWS AND SUGGESTIONS.

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There appears to be a wide and increasing interest in regard to Astrology in this country, and perhaps there are some who wish to study it with as much exactness and thoroughness as the peculiar subject is capable of, in its principal branch the doctrine of nativities. If such are very few as yet, the spirit of this age, now inclining to submit the occult and elusive to scientific scrutiny, is likely to breed them ere long. The present writer has studied it, in quite a private way, from a rational point of view and with careful induction, for many years, taking its fundamental ideas as probable hypotheses and using a strict mathematical method according to the best works on spherical astronomy, with the intent particularly of testing with scientific caution what correspondence there is between "ares of direction" and the events of a person's life, when the data are known to be correct. As geometrical laws shape everything, this is the part that can probably be made nearly an exact science. The rest of it—after rejecting the mouldy old nonsense and jargon, the fictions and lies of the books—is mostly deductions from general and ambiguous symbols which yield little definite meaning to the intellect, though often read wonderfully by some persons who have the fine divining faculty; but this insight, however real in its way, is a raw poetry not science, and is unreliable, especially as to times of events. I have reached numerous confident conclusions on the subject by a long inquisitorial search. Some are negative ones, indeed, yet valuable: but many are drawn from positive proof of close accord between planetary movements and personal events, disclosing to view the main points and lines in the geometrical plan of life, though giving no clear picture of anything.

Astrology is far from being a baseless and refuted pretension, as the cyclopaedias and scientists, with "orthodox mental strut," generally assert. They condemn it without a trial, without examination and experiment, confounding its essential truth with the error and folly that corrupt it. Genteel scholarship and formal intellects are naturally content to abide in ignorance and aversion concerning these ancient ideas of "spherical predominance," which the unsophisticated multitude treat with innate sympathy, and which many great poets and thinkers have entertained as easily credible

in a universe so full of wonders and mystery. Its coarser aspect is conspicuous in the salable books and almanacs of the elusive charlatans who commonly lurk concealed under the name of some angel or star to prey upon the credulous, and in whose hands it has made no progress for hundreds of years. They "hitch their wagon to a star," but remain in the mire and the mist. As practised for gain and gammon, Astrology is eternal truth in distress and demoralized, disgraced by its friends, despised by its foes, and thus ever in deserved ill-repute with sensible people. It was in the same dismal plight in Bacon's time, who said that it "is so full of superstition that scarce anything sound can be discovered in it, though we judge it should rather be purged than absolutely rejected." Bacon also looked for what he calls "*Astronomia vira*, a living astronomy, an astronomy that should set forth the nature, the motion, and the influences of the heavenly bodies, as they really are." Here is the hint of a wise ideal which, after three centuries, modern astronomy, in all its extreme excellency of material means, does not fulfil. It is a vast and complex growth of declared exact science, but all mechanical and soulless, empty of divine reason and human meaning. It has been wanting in the very precision which is its chief pride. That the tabular positions of planets were erroneous, and getting more and more wide of their observed places, was seldom mentioned except in official documents. In 1882 Prof. Newcomb said, "the increasing discordance between theory and observation is a field which greatly needs to be investigated." The showy astronomy was mainly devoted to solar gas and meteors and exact places of millions of the minutest stars. Since then the American astronomers have perfected new tables of the planets.

Astrology is a curious and seductive rather than a useful study; yet is a legitimate subject for research, with the attraction of general interest, but has its own perplexities and hindrances like any other scientific inquiry. It needs an invigorating infusion of modern thought, students of the right kind to give intellectual respectability to its aims and methods; minds with the true solar elevation and openness, "not regarding of any one's mocks," and able to emulate the patient and

severe sagacity that has reached the admirable results of the established sciences. It requires no high mathematical ability, but such as will be enamoured of much dry ciphering if it lead to a real advance by gradual steps. For the sake of such students, to furnish them a new and ample instrument, and to diminish their

liability to error, this volume is issued. Drink deep, or taste not, the Uranian cup of mystical science; the empty froth and dubious flavor are mostly on the surface. Tarry not in the dim region of fallible conjecture, but proceed to mathematic certainties.

*Ars vera est, sed pauci artifices reperiuntur.*

## EXPLANATIONS AND INSTRUCTIONS.

### WITH USEFUL TABLES.

The twelve astrological Houses are formed by trisecting each of the four natural divisions of the heavens made by the meridian and horizon. It is as if the eastern horizon were tilted up to  $\frac{1}{3}$  and to  $\frac{2}{3}$  the distance, and then down in like manner. This makes six equal sections on the east of the meridian, the others being directly opposite. The celestial equator is equally divided by these into arcs of  $30^\circ$  each; the ecliptic on account of its obliquity is unequally divided, hence the present Table which gives for each latitude the intersecting points of the ecliptic with the eastern horizon and those other great circles, to each degree of ecliptic longitude on the meridian and its proper sidereal time. It is the only general one of the kind ever made. The original MS. covers from  $10^\circ$  to  $60^\circ$  of latitude, but the limits here,  $22^\circ$  to  $56^\circ$ , include the whole civilized globe. Hitherto all such tables have been for some one latitude, and they but rudely serve within narrow bounds. Its usefulness therefore is very obvious in making a diagram of the heavens at a given date and locality to get the mundane positions of planets and stars for astrological purposes or any questions that require such a figure. An immense amount of laborious calculation has been necessary, and systematic method and the utmost care was used to insure its correctness. The ascendant, or first house, was strictly computed to the nearest tenth of a minute at a sufficient number of points (according to the more or less uniform variation), and then interpolated downward and across the page by second, third and often fourth differences, insuring general accuracy to the nearest minute. The other and minor houses were similarly fixed at many points to the nearest hundredth of a degree, and interpolated for accuracy to the nearest tenth. More than a thousand operations in trigonometry, by seven or ten logarithms each, were performed, between which to fill in by the quicker but correct process of interpolation. The ecliptic obliquity used was  $23^\circ 27' 15''$ , its mean value in 1885. On account of the very slow decrease in this angle, I find that for dates at least sixty years before and after that year the Table will hardly err anywhere more than  $1'$  on the horizon, and this mostly in the highest latitudes. It will serve still for a century more either way and be but a trifle wrong sometimes. The formula used in the computa-

tions was adapted from that for getting the longitude of "the nonagesimal," or ecliptic point  $90^\circ$  from the horizon, as given in the appendix to Bowditch's Navigator, Problem IV (old editions). It is substantially the same as that by which the ordinary tables are made for single latitudes; but I have examined many of these and find them erroneous in several ways,\* and they betray a defective method in not showing the exact recurrence of the series of differences and the consequent agreements of one quadrant with another. That the simple mathematical facts of these conformities appear in the present Table is a means of *detecting any copying* from it, on pretence of original work, by that sort of persons who make the usual tables. These plainly show the incapacity of the computers, who do more than is needful, and worse than is endurable.

The astrological books are so erroneous and various in the rules for making a figure, that it is well to have here some instructions and cautions for getting the true sidereal time in any case, with which to use this Table. Hardly a single one of those books mentions the correction to be applied for distance in longitude from Greenwich! and most of them ignore also the correction of mean time to sidereal. Neglect of the first one makes an error of  $47'$  at Boston and of  $1^m 20''$  on the Pacific coast, which in arc equals  $12'$  to  $20'$ , a difference of four months in directions to the "angles." To neglect the other correction may cause a further error of  $57'$ —about a whole year. I give the usual table here for making these corrections, and the entire process is as follows:

To the Greenwich sidereal time at the previous mean noon add the correction for longitude of the place, taken from table A, and you have the sidereal time of the same noon at the given place. (East of Greenwich this correction is *minus*.) To this add the interval between that noon and the given time, and by the same table its correction. The sum is the sidereal time or right ascension of the midheaven for the given place and time.

It is to enable students to be accurate, when necessary, that these details of precision are given, as otherwise they must be gathered from several sources. Of course

\* Some give the sidereal time to the nearest minute only, which is often an error of seven minutes of arc, to start with!

they can be omitted in making a rough figure for general consideration, and then the rule is: Gr. sid. t. at previous noon + time from same local noon = approx. sid. t. required. Add 2 or 3 minutes, and it will be nearer right on the average.

There is, however, of late a liability to fall into much larger errors. On Nov. 18, 1883, Standard Time was adopted in this country, and time-pieces no longer indicate mean solar time, though they measure it. Any given standard time must therefore first be corrected to mean time. Boston, for example, is in the Eastern Division, the central meridian of which is five hours west longitude, and the new time throughout that division is fixed at five hours earlier than Greenwich time. As Boston is east of the centre, with longitude or time-difference of  $4^h 44^m 15^s$ , its standard time is too slow by  $15^m 45^s$ . Therefore, add that amount to get the mean time. At New York it is too slow by  $3^m 58^s$ . Philadelphia is in the same division, but a little *west* of the centre, in longitude  $5^h 0^m 36^s$ ; hence standard time there is  $36^s$  too *fast*. So of any place in either of the five hourly divisions: the long.-diff. of cent. merid. and place = corr. to mean t., and is *plus* if the place be east, and *minus* if west, of the meridian. This correction must be made with care, as it amounts to about *half an hour* near the border of a division, and if applied wrongly may make an error of double that! Practically there are many exceptions and uncertainties in the use of our standard time, also liabilities to large error for such places as many in Maine, Ohio and Pennsylvania, where it was not fully adopted until several years after. In "The Pathfinder Railway Guide," of Boston, there *has been* much information as to its local use, with a map.\*

Now with the sidereal time and the *geographic*, or the *geocentric*, latitude (as you may think proper), the Table is used like any table of double entry. Sid. T., with its equivalent are,† to each degree on the meridian or 10th house, heads each main column. "H" below indicates the other houses, and on the side is the Latitude. Intermediate values are got generally by simple proportion between the two nearest ones, in doing which between columns it is easier to use the are than the time. Time can be changed into are by table C. To save needless repetition many figures and decimal points are omitted where they are readily seen above. On each left-hand page a column is duplicated from the previous page to escape the awkwardness of reckoning between columns so situated.

\* As to the various systems of standard time in foreign countries information is not easy to obtain; the astrologians know little of it and say nothing, for they always prefer to evade difficulties.

† The calculations were made from the exact R. A. in are, but it is here given to the nearest tenth of a minute as best for getting proportional parts in the Table.

There is hardly any obvious use in having the minor houses so closely calculated, but it might be needed for some purposes, and their columns would not look well if they differed too much in that respect from the ascendant.

*These Explanations, etc., are now much amended, 1903.*

The geographical latitude is certainly not to be used for primary directions, for all such calculations as are affected by the earth's rotation will be wrong except when the equinoctial points are near the horizon. For those purposes, therefore, the latitude must be corrected for the spheroidal shape of the earth by table B, to convert it into the *geocentric* latitude by "the angle of the vertical," as astronomers do in computing eclipses, for which fact see the same chapter in Bowditch, before re-

TABLE A.												TABLE B.			
CORRECTION OF MEAN TO SIDEREAL TIME.												CORRECTION OF LATITUDE.			
												Always minus.			
Mean-time.	Correc-	Mean-	Correc-	Mean-	Correc-	Mean-	Correc-	Mean-	Correc-	Lat.	Correc-	Lat.	Correc-	Lat.	
H.	s.	m.	s.	m.	s.	m.	s.	m.	s.	*	*	*	*	*	
1	0	9.86	1	0.16	31	5.09	1	.00	31	.09	22	8	8	41	11 37
2	0	19.71	2	0.33	32	5.26	2	.00	32	.09	23	8	25	42	11 40
3	0	29.57	3	0.49	33	5.42	3	.01	33	.09	24	8	42	43	11 42
4	0	39.43	4	0.66	34	5.58	4	.01	34	.09	25	8	55	44	11 43
5	0	49.28	5	0.82	35	5.75	5	.01	35	.10	26	9	14	45	11 44
6	0	59.14	6	0.99	36	5.91	6	.02	36	.10	27	9	29	46	11 44
7	1	9.00	7	1.15	37	6.08	7	.02	37	.10	28	9	43	47	11 43
8	1	18.85	8	1.31	38	6.24	8	.02	38	.10	29	9	56	48	11 40
9	1	28.71	9	1.48	39	6.41	9	.02	39	.11	30	10	9	49	11 38
10	1	38.57	10	1.64	40	6.57	10	.03	40	.11	31	10	21	50	11 34
11	1	48.42	11	1.81	41	6.73	11	.03	41	.11	32	10	32	51	11 29
12	1	58.28	12	1.97	42	6.90	12	.03	42	.11	33	10	42	52	11 24
13	2	8.13	13	2.14	43	7.06	13	.04	43	.12	34	10	52	53	11 17
14	2	17.99	14	2.30	44	7.23	14	.04	44	.12	35	11	1	54	11 10
15	2	27.85	15	2.46	45	7.39	15	.04	45	.12	36	11	9	55	11 2
16	2	37.70	16	2.63	46	7.56	16	.04	46	.13	37	11	16	56	10 54
17	2	47.56	17	2.79	47	7.72	17	.05	47	.13	38	11	23	57	10 44
18	2	57.42	18	2.96	48	7.88	18	.05	48	.13	39	11	25	58	10 34
19	3	7.27	19	3.12	49	8.05	19	.05	49	.13	40	11	31	59	10 23
20	3	17.13	20	3.28	50	8.21	20	.05	50	.14	41	11	37	60	10 11
21	3	26.99	21	3.45	51	8.38	21	.06	51	.14					
22	3	36.84	22	3.61	52	8.54	22	.06	52	.14					
23	3	46.70	23	3.78	53	8.71	23	.06	53	.15					
			24	3.94	54	8.87	24	.07	54	.15					
			25	4.11	55	9.03	25	.07	55	.15					
			26	4.27	56	9.20	26	.07	56	.15					
			27	4.43	57	9.36	27	.07	57	.16					
			28	4.60	58	9.53	28	.08	58	.16					
			29	4.76	59	9.69	29	.08	59	.16					
			30	4.93	60	9.86	30	.08	60	.16					
			The sum of correct will be taken to nearest sec-												N. B. This table is newly calculated from the latest determination of the ellipticity, $E$ , by the formula, $\tan \text{geoc. Lat.} = (1 - E) \tan \text{Lat.}$ $E$ , or, $(1 - E)^2$ , is 0.0070361.

ferred to, and the reductions of latitude in the British and the American Ephemeris with the list of observatories. This correction often alters very much all semi-arc, especially in high latitudes; hence a main cause of the monstrous errors constantly made by those who attempt to calculate primary directions is their use of the geographic latitude.

The matter of the "poles" of the minor houses is unsound in the astrological books, and their tables of them are wrong. It should be understood, therefore, that those houses in the present Table are calculated by a strictly correct method, which for some parts in high latitudes gives results that differ, sometimes more than half a degree, from those got by using the common table of poles. I found it necessary to examine the whole question thoroughly. These poles are angles analogous to the pole of a place, its latitude, and while

the ascendant is obtained directly from that, the other houses can be had precisely only by a trial-and-error process from a mean or approximate pole to begin with, because the poles are factors in the operation that depend upon the very thing sought for. Now the usual table of poles is not made for an average case, but for the extreme one, that is when  $\varpi$  0 or  $\nu$  0 is on the cusp — the blunder of some one about a century ago, and has been blindly copied ever since. The errors therein are large for high latitudes. The proper average poles are a mean between those of  $\varphi$  0 on the cusp of a house, and those when  $\varpi$  0 is there. I find that a near average is had when 8 22, or any point of same declination, is on the cusps. The table D below is made accordingly. The formula for 11th and 3d houses is  $\tan \text{pole} = \frac{\sin \frac{1}{2} \text{asc. diff.}}{\tan \text{decl.}}$  For the 12th and 2d,  $\frac{1}{2}$  is put instead of  $\frac{1}{3}$ .

Ecliptic obliquity is taken at  $23^\circ 27' 15''$ , but its variation for many years has little effect. This table will give in all cases nearly true results\* directly by the usual formula, especially if account be made of 2d differences between the tabular latitudes.

TABLE C. TO CONVERT SIDEREAL TIME INTO R. A. IN ARC.						TABLE D. APPROXIMATE POLES.			
Time	Arc.	Time	Arc.	Time	Arc.	Lat.	11th and 3d H.	12th and 2d H.	
II.	°	III.	°	III.	°	°	°	°	
	8.		8.		8.	8.	8.	8.	
1	15	1	0 15	31	7 45	10	3 21.9	6 42.4	
2	30	2	0 30	32	8 0	13	4 24.3	8 45.3	
3	45	3	0 45	33	8 15	16	5 28.0	10 49.8	
4	60	4	1 0	34	8 30	19	6 33.5	12 56.5	
5	75	5	1 15	35	8 45	22	7 41.4	15 5.9	
6	90	6	1 30	36	9 0	25	8 52.0	17 18.3	
7	105	7	1 45	37	9 15	28	10 5.8	19 34.2	
8	120	8	2 0	38	9 30	31	11 23.5	21 54.1	
9	135	9	2 15	39	9 45	34	12 45.8	24 18.7	
10	150	10	2 30	40	10 0	37	14 13.7	26 48.6	
11	165	11	2 45	41	10 15	40	15 48.1	29 24.1	
12	180	12	3 0	42	10 30	42	16 55.1	31 11.3	
13	195	13	3 15	43	10 45	44	18 6.3	33 1.7	
14	210	14	3 30	44	11 0	46	19 22.1	34 55.5	
15	225	15	3 45	45	11 15	48	20 42.8	36 52.8	
16	240	16	4 0	46	11 30	50	22 9.0	38 53.6	
17	255	17	4 15	47	11 45	51	22 54.6	39 55.5	
18	270	18	4 30	48	12 0	52	23 41.9	40 58.6	
19	285	19	4 45	49	12 15	53	24 31.2	42 2.8	
20	300	20	5 0	50	12 30	54	25 22.6	43 8.1	
21	315	21	5 15	51	12 45	55	26 16.1	44 14.5	
22	330	22	5 30	52	13 0	56	27 12.0	45 22.1	
23	345	23	5 45	53	13 15	57	28 10.5	46 31.0	
24	360	24	6 0	54	13 30	58	29 11.8	47 41.2	
		25	6 15	55	13 45	59	30 16.3	48 52.7	
		26	6 30	56	14 0	60	31 24.1	50 5.7	
<small>This table is merely to multiply by 15, the units of time are those larger than those of arc.</small>									
<small>This table is only for use in making figures without a table of houses, or to form such a one.</small>									

\* The test of exactness in such point is, that  $\frac{1}{3}$  (or  $\frac{2}{3}$ ) its semi-arc should equal its meridian distance by right ascension.

## OF FIGURES FOR SOUTH LATITUDE.

Though the Table, as it stands, is for North latitudes only, it is equally and easily available for Southern ones, as follows: Obtain the R. A. and longitude of the mid-heaven as usual; then, instead of getting the other houses from same page, add 180°, and in *that* part of the Table, with the latitude, find the values for those houses, but *substitute the opposite signs* for the ones found there.\*

Make the figure with ascendant on the left as usual. To reverse it, though correct in idea, causes endless confusion to one accustomed to the common position. Only bear in mind that the equator and zodiacal ring above the earth are now behind you, to the North. In calculations from a Southern figure the only change is that the plus-or-minus rule for ascensional difference is reversed.

If the geographical latitude be proper for figures, then the English tables of houses are tolerably correct except some inaccuracies in making, and by taking ecliptic obliquity at  $23^\circ 28'$ , its amount more than a century ago. But the whole system of primary direction has been confused and falsified owing to ignorance of that essential factor, the Geocentric latitude. These pages rectify all that and provide means for correct figures at any point in two wide belts around the world, at any date for about two centuries before or after our assumed Obliquity of 1885.

Of course there can be no really scientific and thorough treatment of nativities unless the factors for all operations are complete and correct. The present work is "well calculated" to facilitate that; and our "Sixteen Principal Stars" repairs many glaring omissions in all writers on the subject.

The working of nativities has always been utterly chaotic, and is worse than ever now that they falsely equate arcs by that vain scheme of *a degree for a year*. It can never be otherwise without the full astronomical basis and a right mathematical method, in place of the seant system and excessive error of the sordid Sidrophels who debase the real astrology by their confusions and deceit, and whose spurious teaching is the worst obstacle to the development of what exact science in it is possible. *O curve animæ, et mathesis inanis.*

\* This very necessary problem is left out of all the old books, and recent writers have mostly ignored or befooled it.

2

## COMPREHENSIVE TABLE OF HOUSES

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

2

## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																									
SID. T.	0 0 0	0 3 40	0 7 20	0 11 1	0 14 41	0 18 21																													
ARC	0° 0'.0	0° 55'.0	1° 50'.1	2° 45'.2	3° 40'.2	4° 35'.3																													
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3															
Lat.	8	9	10	11	12	8	9	10	11	12	8	9	10	11	12	8	9	10	11	12															
22°	4.0	7.9	9.8	3.2	29.4	5.0	8.8	9.57	4.0	0.3	6.0	9.7	10.46	4.8	1.3	7.0	10.6	11.35	5.7	2.2	8.0	11.5	12.24	6.5	3.1	9.0	12.4	13.13	7.3	4.1					
23	1	8.2	9.35	4	5	1	9.1	10.24	2	4	1	10.0	11.13	5.1	4	1	9.12	2	9	3	1	8.12	51	7	2	1	7.13	40	6	1					
24	2	6.10	10.3	7	6	2	5.10	10.52	5	5	2	4.11	11.41	3	4	2	11.3	12.29	6.2	3	2	12.2	13.18	7.0	3	2	13.1	14.7	8	2					
25	3	9.10	10.31	9	7	3	8.11	11.20	8	6	3	7.12	8	6	5	3	6.12	57	4	4	3	5.13	45	2	4	3	4.14	34	8.1	3					
26	4	9.2	10.59	4.2	29.8	4	10.1	11.48	5.0	0.7	4	11.0	12.36	8	6	4	9.13	25	7	5	4	8.14	13	5	3.4	4	7.15	1	3	4.3					
27	4.5	6.11	11.27	5	8	5.5	5.12	11.16	3	7	6.5	4.13	5	6.1	1.7	7.5	12.3	13.53	9	2.6	8.5	13.2	14.41	7	5	9.5	14.1	15.29	6	4					
28	6	9.11	11.56	7	9	6	8.12	12.45	6	8	7	7.13	34	4	7	7	6.14	22	7.2	7	7	5.15	10	8.0	6	7	4.15	57	8	5					
29	7	10.2	12.26	5.0	π	7.11.1	11.13	15	8	9	8.12.1	14.3	6	8	8.13.0	14.51	5	7	8	9.15	38	3	7	8	8.16	26	9.1	6							
30	8	6.12	12.56	3	0.1	8	5.13	13.44	6.1	1.0	9	4.14	32	9	9	9	3.15	20	7	8	9.14	216	7	5	3.7	9.15.1	16.55	3	4.7						
31	4.9	11.0	13.26	6	2	6.0	9.14	15	4	1	7.0	8.15	2	7.2	2.0	8.0	7.15	50	8.0	9	9.0	6.16	37	8	8	10.0	5.17	25	6	7					
32	5.0	3.13	13.57	8	3	1	12.2	14.45	7	2	2	13.2	15.33	5	1	2	14.1	16.20	3	3.0	2	15.0	17	7	9.1	9	2	9.17	54	9	8				
33	2	7.14	14.29	6.1	4	2	6.15	15.17	9	3	3	6.16	4	8	2	3	5.16	51	5	1	3	4.17	38	3	4.0	3	16.3	18.25	10.1	9					
34	3	12.1	15.1	4	5	4	13.0	15.49	7.2	4	4	14.0	16.36	8.0	3	5	9.17	22	8	2	5	8.18	9	6	1	5	7.18	56	4	5.0					
35	4	5.15	15.34	7	0.6	6.5	4.16	21	5	1.5	7.6	4.17	8	3	4	8.6	15.3	17.54	9.1	3	9.6	16.2	18.41	9	2	6	17.1	19.27	7	1					
36	5.6	13.0	16.8	7.0	7	7	9.16	15.54	8	6	7	9.17	41	6	2.5	8	8.18	27	4	4	8	7.19	13.10.2	3	8	8	6.19	59	11.0	2					
37	7	4.16	16.42	3	8	8.14.3	17.28	8.1	7	9	15.3	18.14	9	6	9	16.2	19.0	7	3.5	9	17.1	19.46	5	4.4	11.0	18.0	20.32	3	2						
38	9	9.17	17.16	7	9	7.0	8.18	2	4	8	8.1	8.18	48	9.2	7	9.1	7.19	34	10.0	6	10.1	6.20	20	8	4	1	5.21	5	6	5.3					
39	6.1	14.4	17.52	8.0	1.0	1	15.3	18.37	7	9	2	16.3	19.23	5	8	3	17.2	20	8	3	7	3.18.1	20.54	11.0	5	3	19.0	21.39	8	4					
40	3	9.18	18.28	3	1	3	8.19	13	9.0	2.0	4	8.19	59	9	9	4	7.20	44	6	8	5	6.21	29	3	6	5	5.22	14	12.1	5					
41	4	15.4	19.5	7	2	4	16.3	19.50	3	1	6	17.3	20.35	10.2	3.0	6	18.2	21	20	11.0	9	7	19.1	22	4	6	4.7	7.20.0	22.49	4	6				
42	6	9.19	43	9.0	4	6	9.20	28	7	2	8	8.21	12	5	1	8	7.21	56	3	4.0	9	6.22	41	12.0	8	9	5.23	25	7	5.7					
43	8	16.5	20.22	3	5	8.17.4	21	6	10.0	4	9	18.4	21.50	9	2	10.0	19.3	22	34	6	1	11.1	20.2	23	18	3	9	12.1	21.1	24	2	13.1	8		
44	7.0	17.1	21.1	6	1.6	8.0	18.0	21.45	4	5	9.1	19.0	22.29	11.2	3	1	9.23	13	12.0	2	3	8.23	56	7	5.0	4	7.24	40	4	9					
45	2	7.21	21.42	10.0	7	2	6.22	26	8	2.6	3	6.23	9	5	3.4	3	20.5	23	52	3	3	4.21	4.24	35	13.0	1	6.22	3	25	19	8	6.0			
46	5	18.3	22.24	4	8	4	19.3	23	7	11.1	7	5	20.3	23.50	8	5	5	21.1	24	33	6	4.4	6.22	0	25	16	4	2	8	9.25	58	14.1	1		
47	7	19.0	23.7	8	9	6	9.23	30	5	8	7	9.24	32	12.2	6	7	8.25	15	9	5	8	7.25	57	7	3	13.0	23.6	26	39	4	2				
48	9	7.23	31	11.2	2.1	8	20.6	24	33	9	9	9.21	6	25.15	6	7	9.22	5	25.57	13.3	6	12.0	23.4	26	39	14.1	4	2	24.3	27	20	8	3		
49	8.1	20.4	24.36	6	2	9.1	21.3	25	18	12.3	3.0	10.2	22.3	25	59	13.0	9	11.2	23.2	26	41	7	7	3.24	0	27	22	5	5.6	5	9.28	3	15.2	4	
50	3	21.2	25.22	12.0	3	4	22.1	26	4	7	2	5	23.0	26	45	4	4.0	5	9.27	26	14.1	9	6	7.28	6	9	7	7	25.6	28	47	6	6.5		
51	6	22.0	26.10	4	4	6	9.26	51	13.1	4	8	8.27	31	8	2	8	24.7	28	12	5	5.0	9.25	5	28	52	15.3	8	14.0	26.4	29	32	16.0	6		
52	9	9.26	59	8	6	9.23	7	27	40	5	5	11.1	24.6	28	20	14.2	3	12.1	25.5	28	59	9	1	13.2	26.3	29	39	7	9	3.27	2	0.19	4	7	
53	9.2	23.8	27.50	13.3	8	10.2	24.6	28	30	14.0	3.6	4	25.5	29	9	7	4	4	26.4	29	48	15.4	2	5	27.2	0	27	16.1	6.1	6	28.1	1	7	8	8
54	5	24.8	28.43	8	3.0	6	25.6	29	22	5	7	7	26.5	0	0	15.2	5	8	27.4	0	39	9	4	9	28.2	1	17	5	2	15.0	29.1	1	5.6	17.2	7.0
55	8	25.8	29.37	14.3	1	9	26.7	0	15	15.0	9	12.0	27.5	0	53	7	7	13.2	28.4	1	31	16.4	6	14.3	29.3	2	9	17.0	4	4	0.1	24	7	2	
56	10.1	27.0	0.32	8	3	11.3	27.8	1	10	5	4.1	4	28.6	1	47	16.2	8	6	29.5	2	25	9	7	6	0.4	3	2	5	5	8	1.2	3	39	18.2	3

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																														
SID. T. 0 22 2	6°	0 25 42	6° 25'.6	0 29 23	7° 20'.8	0 33 4	8° 16'.0	0 36 45	9° 11'.3	0 40 27	10° 6'.6																													
ARC	5° 30'.4	7°		8°		9°		10°		11°																														
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3															
Lat.	8	□	25	9	吸	8	□	25	9	吸	8	□	25	9	吸	8	□	25	9	吸	8	□	25	9	吸															
22°	10.0	13.3	14.2	8.2	5.0	10.9	14.2	14.51	9.0	5.9	11.9	15.1	15.40	9.9	6.8	12.9	16.0	16.29	10.7	7.8	13.9	16.9	17.18	11.6	8.7	14.5	17.7	18.7	12.4	9.6										
23	1	6	14	29	4	1	11.1	5	15	17	3	6.0	12.0	4	16	6	10.1	9	13.0	3	16	55	9	8	14.0	17.2	17.44	8	8	15.0	18.1	18.32	6	7						
24	2	14.0	14	55	7	1	2	8	15	44	5	0	2	8	16	32	3	7.0	1	6	17	21	11.2	9	1	5	18	10	12.0	8	8	1	4	18.58	8	8				
25	3	3	15	22	9	2	3	15.2	16	11	7	1	3	16.1	16	59	6	0	2	17.0	17	47	4	8.0	2	8	18	36	2	9	2	2	7	19	24	13.1	8			
26	4	6	15	50	9.1	3	4	5	16	38	10.0	2	4	4	17	26	8	1	4	3	18	14	6	0	3	18.2	19	2	4	9	3	19.1	19	50	3	9				
27	10.5	15.0	16	17	4	5.3	11.5	9	17	5	2	3	12.5	8	17	54	11.0	2	13.5	6	18	41	9	1	14.5	5	19	29	7	9.0	15.5	4	20	17	5	9				
28	7	3	16	45	6	4	7	16.2	17	33	5	6.3	7	17.1	18	21	3	2	6	18.0	19	9	12.1	1	6	9	19	57	9	1	6	8	20	44	8	10.0				
29	8	7	17	14	9	5	8	6	18	1	7	4	8	5	18	49	5	7.3	8	3	19	37	3	2	7	19.2	20	24	13.2	1	7	20.1	21	12	14.0	1				
30	9	16.0	17	43	10.2	6	9	9	18	30	11.0	5	9	8	19	17	8	4	9	7	20	5	6	8.3	9	6	20	52	4	2	9	5	21	39	2	1				
31	11.1	4	18	12	4	5.6	12.1	17.3	18	59	2	5	13.0	18.2	19	46	12.0	5	14.0	19.1	20	33	8	4	15.0	9	21	20	7	3	16.0	8	22	7	5	2				
32	2	8	18	41	7	7	2	7	19	29	5	6.6	2	5	20	16	3	5	2	4	21	3	13.1	4	2	20.3	21	49	9	9.3	2	21.2	22	36	7	2				
33	3	17.2	19	12	11.0	8	4	18.1	19	59	8	7	3	9	20	45	6	6	3	8	21	32	4	5	3	7	22	18	14.2	4	3	6	23	5	15.0	10.3				
34	5	6	19	42	2	9	5	5	20	29	12.0	8	5	19.3	21	15	8	7.7	5	20	22	2	6	6	5	21.1	22	48	4	5	5	22.0	23	34	2	4				
35	7	18.0	20	14	5	6.0	7	9	21	0	3	9	7	8	21	46	13.1	7	7	6	22	32	9	8.6	7	5	23	18	7	5	7	4	24	4	5	4				
36	8	5	20	45	8	0	8	19.3	21	31	6	7.0	8	20.2	22	17	4	8	8	21.1	23	3	14.2	7	8	22.0	23	49	15.0	6	8	8	24	35	8	5				
37	12.0	9	21	18	12.1	1	13.0	8	22	3	9	1	14.0	7	22	49	7	9	15.0	5	23	34	4	8	16.0	4	24	20	2	9.7	17.0	23.3	25	5	16.0	6				
38	2	19.4	21	51	4	2	2	20.3	22	36	13.1	2	2	21.1	23	21	9	8.0	2	22.0	24	7	6	9	2	9	24	52	5	8	2	7	25	37	2	10.6				
39	3	9	22	24	6	6.3	4	7	23	9	4	3	4	6	23	54	14.2	1	4	5	24	39	9	9	4	23.4	25	24	7	8	4	24.2	26	9	5	7				
40	5	20.4	22	58	9	4	5	21.2	23	43	7	7.4	6	22.1	24	28	5	1	6	23.0	25	13	15.2	9.0	6	9	25	57	16.0	9	6	8	26	42	8	8				
41	7	9	23	33	13.2	5	7	8	24	18	14.1	4	8	6	25	2	8	2	8	5	25	47	5	1	8	24.4	26	31	3	10.0	8	25.3	27	15	17.1	9				
42	9	21.4	24	9	5	6	14.0	22.3	24	53	4	5	15.0	23.2	25	37	15.1	8.3	16.0	24.1	26	21	8	2	17.0	9	27	5	6	1	18.0	8	27	49	4	9				
43	13.2	22.0	24	46	8	6.7	2	9	25	30	7	5	2	7	26	13	4	4	2	6	26	57	16.1	3	2	22.5	27	40	9	1	3	26.4	28	24	7	11.0				
44	4	6	25	23	14.1	8	4	23.5	26	7	15.0	7.6	4	24.3	26	50	7	5	5	25.2	27	33	5	9.4	5	26.1	28	16	17.2	2	5	9	28	59	18.0	1				
45	6	23.2	26	2	5	9	6	24.1	26	44	3	7	6	9	27	27	16.0	6	7	8	28	10	8	4	7	7	28	53	5	10.3	7	27	5	29	36	3	2			
46	8	8	26	41	8	7.0	8	7	27	23	6	8	8	25.5	28	6	3	8.7	9	26.4	28	48	17.1	5	9	27	3	29	30	8	4	9	28.1	0	13	6	3			
47	14.0	24.5	27	21	15.1	1	15.0	25.3	28	3	16.0	9	16.1	26.2	28	45	6	8	17.1	27.1	29	27	4	6	18.2	9	0	9	18	1	5	19.1	8	0	51	19.0	11.3			
48	3	25.1	28	2	5	2	2	26.0	28	44	4	8.0	4	8	29	25	17.0	9	4	7	0	7	7	9.7	5	28.6	0	48	5	6	4	29	4	13.0	3	4				
49	5	8	28	45	9	3	5	7	29	26	7	1	6	27.5	0	7	4	9.0	7	28.4	0	48	18.1	8	7	29.2	1	29	8.107	7	0	1	2	9	7	5				
50	8	26.5	29	28	16.3	4	8	27.4	0	9	17.1	2	9	28.2	0	49	8	1	18.0	29.1	1	30	5	9	19.0	9	2	10	19	2	8	20.0	8	2	50	20.0	6			
51	15.1	27.3	0	13	7	7.5	16.1	28.2	0	53	5	3	17.2	29.0	1	33	18.2	2	3	9	212	9	10.0	3	0.7	252	6	9	3	15	3	32	3	11.7						
52	4	28.1	0	58	17.1	6	4	29.0	1	38	9	8.4	5	8	218	6	3	6	0.7	257	19.3	1	6	1	5	3	36	20	0	11	0	7	2	3	4	15	7	8		
53	7	29.0	1	46	5	7	8	8	22	18.3	5	9	0	7	3	4	19.0	9.4	9	1	5	342	7	2	20.0	2	3	4	21	4	12.1	3	2	5	21	1	9			
54	16.1	9	2	34	9	8	17.2	0	8	3	13	7	6	18.3	1	6	3.51	4	5	19.3	24	4	29	20	1	3	4	3.2	5	7	8	2	5	41	5	45	5	12.0		
55	5	0.9	3	24	18.4	8.0	6	1.8	4	2	19.1	8	8	7	2.6	4	40	8	6	7	3	4	5	17	5	4	8	4	2	5	55	21	2	3	9	51	6	32	9	1
56	9	2.0	4	16	9	1	18.0	2.9	4	53	6	9	19.1	3.7	5	30	20.2	7	20.2	4.5	6	7	9	5	21.3	5.2	6	44	6	4	22.4	6	1	7	21	22	3	2		

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

SID. T. 0 40 27	H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.																					
	0 44 8	0 47 50	0 51 32	0 55 14	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57	0 58 57																				
ARC	10° 6'.6	11°	11° 2'.0	11° 57'.5	12° 53'.0	12° 48'.6	13° 48'.6	14° 44'.3	14° 44'.3	15°	15°	15°	15°	15°	15°	16°	16°																				
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3												
Lat.	8	II	26	8	IV	8	II	26	8	IV	8	II	26	8	IV	8	II	26	8	II	26	8	II	26													
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°													
22	14.8	17.7	18	7	12.4	9.6	15.8	18.6	18	55	13.3	10.6	16.8	19.5	19	44	14.1	11.5	17.7	20.4	20	33	15.0	12.4	18.7	21.2	21	22	15.8	13.4	19.7	22.1	22	10	16.7	14.3	
23	15.0	18.1	18	32	6	7	9	9	19	21	5	6	9	8	20	9	3	6	9	7	20	58	2	5	8	6	21	47	16.0	4	8	4	22	35	9	4	
24	1	4	18	58	8	8	16.1	19.3	19	46	7	7	17.0	20.2	20	35	5	6	18.0	21.0	21	23	4	5	19.0	9	22	12	2	5	9	8	23	0	17.1	4	
25	2	7	19	24	13.1	8	2	6	20	12	9	7	2	5	21	1	8	7	1	4	21	49	6	6	1	22.2	22	37	4	5	20.0	23.1	23	25	3	5	
26	3	19.1	19	50	3	9	3	9	20	38	14.1	10.8	3	8	21	27	15.0	7	2	7	22	15	8	6	2	6	23	3	6	13.6	2	4	23	51	5	5	
27	15.5	4	20	17	5	9	4	20.3	21	5	4	8	4	21.2	21	53	2	11.8	4	22.0	22	41	16.0	12.7	4	9	23	29	9	6	3	8	24	17	7	14.6	
28	6	8	20	44	8	10.0	16.6	6	21	32	6	9	17.6	5	22	20	4	8	18.5	4	23	7	3	7	19.5	23.3	23	55	17.1	7	5	24.1	24	43	9	6	
29	7	20.1	21	12	14.0	1	7	21.0	21	59	8	11.0	7	9	22	46	7	9	7	7	23	34	5	8	6	6	24	21	3	7	20.6	5	25	9	18.1	6	
30	9	5	21	39	2	1	9	4	22	26	15.1	0	8	22.2	23	14	9	9	8	23.1	24	1	7	9	8	24.0	24	48	5	13.8	8	8	25	35	4	7	
31	16.0	8	22	7	5	2	17.0	7	22	54	3	1	18.0	6	23	41	16.1	12.0	19.0	5	24	28	9	9	20.0	3	25	15	8	8	9	25.2	26	2	6	7	
32	2	21.2	22	36	7	2	2	22.1	23	23	6	1	1	23.0	24	9	4	1	1	8	24	56	17.2	13.0	1	7	25	43	18.0	9	21.1	6	26	30	8	14.8	
33	3	6	23	5	15.0	10.3	3	5	23	51	8	2	3	3	24	38	6	1	3	24.2	25	24	4	0	3	25.1	26	11	2	9	3	26.0	26	57	19.0	8	
34	5	22.0	23	34	2	4	5	9	24	21	16.1	11.3	5	7	25	7	9	2	5	6	25	53	7	1	5	5	26	39	5	14.0	4	4	27	25	3	9	
35	7	4	24	4	5	4	6	23.3	24	50	3	3	6	24.2	25	36	17.1	2	6	25.0	26	22	9	1	6	9	27	8	7	0	6	8	27	54	5	9	
36	8	8	24	35	8	5	8	7	25	20	6	4	8	6	26	6	4	12.3	8	5	26	52	18.2	2	8	26.3	27	37	19.0	1	8	27.2	28	23	8	15.0	
37	17.0	23.3	25	5	16.0	6	18.0	24.2	25	51	8	5	19.0	25.0	26	36	6	4	20.0	9	27	22	4	13.3	21.0	8	28	7	2	1	22.0	6	28	53	20.0	0	
38	2	7	25	37	2	10.6	2	6	26	22	17.1	5	2	5	27	7	9	4	2	26.4	27	52	7	3	2	27.2	28	37	5	14.2	2	28.1	29	23	2	1	
39	4	24.2	26	9	5	7	4	25.1	26	54	4	11.6	4	26.0	27	39	18.2	5	4	9	28	23	9	4	4	7	29	8	7	3	4	6	29	53	4	2	
40	6	8	26	42	8	8	6	6	27	26	6	7	6	5	28	11	4	6	6	27.4	28	55	19.2	4	6	28.2	29	39	20.0	3	6	29.1	0	24	7	15.2	
41	8	25.3	27	15	17.1	9	8	26.1	27	59	9	7	8	27.0	28	43	7	12.6	8	9	29	27	5	5	8	7	0	11	3	4	8	6	0	55	21.0	3	
42	18.0	8	27	49	4	9	19.0	7	28	33	18.2	8	20.0	5	29	17	19.0	7	21.0	28.4	0	0	8	13.6	22.0	29.2	0	44	5	14.4	23.0	0	1	28	2	3	
43	3	26.4	28	24	7	11.0	3	27.2	29	7	5	9	3	28.1	29	51	3	8	3	9	0	34	20.0	6	3	8	1	17	8	5	3	6	2	1	5	4	
44	5	9	28	59	18.0	1	5	8	29	42	8	12.0	5	7	0	25	6	8	5	29.5	1	8	3	7	5	0.3	1	51	21.1	6	5	1.2	2	34	8	15.5	
45	7	27.5	29	36	3	2	7	28.4	0	18	19.1	1	7	29.3	1	1	8	9	7	0.1	143	6	8	8	9	2	26	4	7	8	8	3	8	22.1	5		
46	9	28.1	0	13	6	3	9	29.0	0	55	4	2	9	9	1	37	20.1	13.0	9	7	2	19	9	9	23.0	1.5	3	1	7	14.7	24.0	2	4	344	4	6	
47	19.1	8	0	51	19.0	11.3	20.2	6	1	32	7	2	21.2	0.5	2	14	4	0	22.2	1	3	25.6	21.2	14.0	3	2	1	3	38	22.0	8	3	3.0	4	19	7	7
48	4	29.4	1	30	3	4	5	0.3	2	11	20.0	12.3	5	1.1	2	52	7	1	5	2.0	3	34	5	0	6	8	4	15	3	9	6	6	4	56	23.0	15.8	
49	7	0.1	2	9	7	5	8	9	25.0	3	4	8	8	3	31	21.0	2	8	6	4	12	8	1	9	3.5	4	53	6	9	9	4.3	5	33	3	8		
50	20.0	8	25.0	20.0	6	21.1	1.6	3	31	7	5	22.1	2.5	4	11	4	3	23.1	3.3	4	51	22.2	2	24.2	4.1	5	32	9	15.0	25.2	5.0	6	12	6	9		
51	3	1.5	3	32	3	11.7	4	2.4	4	12	21.0	5	4	3.2	4	52	7	13.4	5	4.1	5	32	5	3	6	8	6	11	23.2	1	6	7	6	51	9	9	
52	7	2.3	4	15	7	8	8	3.2	4	55	4	12.6	8	4.0	5	34	22.1	4	9	9	6	13	9	14.3	9	5.6	6	52	6	1	26.0	6.5	7	32	24.3	16.0	
53	21.1	3.2	5	0	21.1	9	22.2	4.1	5	38	8	7	23.2	9	6	17	5	5	24.3	5.7	6	56	23.2	4	25.3	6.4	7	34	9	2	4	7.3	8	13	6	1	
54	5	4.1	5	45	5	12.0	6	5.0	6	23	22.2	8	6	5.8	7	2	9	6	7	6.6	7	40	6	5	7	7.3	8	18	24.3	15.3	8	8.1	8	56	25.0	2	
55	9	5.1	6	32	9	1	23.0	5.9	7	10	6	9	24.0	6.7	7	47	23.3	7	25.1	7.5	8	25	24.0	6	26.1	8.2	9	2	7	4	27.2	9.0	9	40	4	2	
56	22.4	6.1	7	21	22.3	2	5	6.9	7	57	23.0	13.0	5	7.7	8	34	7	8	6	8.5	9	11	4	7	6	9.2	9	48	25.1	5	7	10.0	10	25	8	3	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.										H. M. S.										H. M. S.										H. M. S.																																			
SID. T. 1 2 40					1 6 23					1 10 7					1 13 51					1 17 36					1 21 21					H. M. S.					H. M. S.																														
ARC 15° 40'.0 17°										16° 35'.9										17° 31'.8										18° 27'.8																																			
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3																									
Lat.	8	II	25	25	吸	8	II	25	25	吸	8	II	25	25	吸	8	II	25	25	吸	8	II	25	25	吸	8	II	25	25	吸	8	II	25	25	吸	8	II	25	25	吸																									
22°	20.6	23.0	22.59	17.5	15.3	21.6	23.8	23.49	18.4	16.2	22.5	24.7	24.38	19.3	17.2	23.5	25.6	25.27	20.1	18.1	24.4	26.4	26.16	21.0	19.1	25.4	27.3	27.5	21.9	20.1	20.6	23.0	23.49	18.4	15.3	21.6	23.8	23.49	18.4	16.2	22.5	24.7	24.38	19.3	17.2	23.5	25.6	25.27	20.1	18.1	24.4	26.4	26.16	21.0	19.1	25.4	27.3	27.5	21.9	20.1					
23°	7	3	23.24	7	3	7	24.2	24.13	6	3	7	25.0	25.2	25	2	5	2	6	9	25.51	3	2	6	8	26.40	2	1	5	6	27.29	22.1	1	23°	7	3	23.24	7	3	7	24.2	24.13	6	3	7	25.0	25.2	25	2	5	2	6	9	25.51	3	2	6	8	26.40	2	1	5	6	27.29	22.1	1
24°	9	6	23.49	9	4	8	5	24.38	8	3	8	4	25.26	7	3	7	26.2	26.15	5	2	7	27.1	27.4	4	2	7	9	27.53	3	1	24°	9	6	23.49	9	4	8	5	24.38	8	3	8	4	25.26	7	3	7	26.2	26.15	5	2	7	9	27.53	3	1									
25°	21.0	24.0	24.14	18.1	4	22.0	8	25.2	21.90	3	9	7	25.51	9	3	9	5	26.39	7	2	8	4	27.28	6	2	8	8	28.3	28.17	5	2	25°	21.0	24.0	24.14	18.1	4	22.0	8	25.2	21.90	3	9	7	25.51	9	3	9	5	26.39	7	2	8	4	27.28	6	2	8	8	28.3	28.17	5	2		
26°	1	3	24.39	3	4	1	25.2	25.27	2	4	23.1	26.0	26.16	20.1	3	24.0	9	27.4	9	3	25.0	7	27.52	8	2	26.0	6	28.41	7	2	26°	1	3	24.39	3	4	1	25.2	25.27	2	4	23.1	26.0	26.16	20.1	3	24.0	9	27.4	9	3	25.0	7	27.52	8	2	26.0	6	28.41	7	2				
27°	3	6	25.5	6	15.5	2	5	25.53	4	16.4	2	4	26.41	3	17.4	2	27.2	27.29	21.1	18.3	1	28.1	28.17	22.0	19.3	1	9	29.5	8	20.2	27°	3	6	25.5	6	15.5	2	5	25.53	4	16.4	2	4	26.41	3	17.4	2	27.2	27.29	21.1	18.3	1	28.1	28.17	22.0	19.3	1								
28°	4	25.0	25.30	8	5	4	8	26.18	6	5	4	7	27.6	5	4	3	6	27.54	3	3	3	4	28.42	2	3	3	3	29.3	29.30	23.0	2	28°	4	25.0	25.30	8	5	4	8	26.18	6	5	4	7	27.6	5	4	3	3	4	28.42	2	3	3	3	29.3	29.30	23.0	2						
29°	21.6	3	25.56	19.0	6	22.5	26.2	26.44	8	5	5	27.1	27.32	7	4	5	9	28.19	5	4	5	8	29.7	4	3	5	3	29.55	2	3	29°	21.6	3	25.56	19.0	6	22.5	26.2	26.44	8	5	5	27.1	27.32	7	4	5	9	28.19	5	4	5	8	29.7	4	3	5	3	29.55	2	3				
30°	7	7	26.23	2	6	7	6	27.10	20.1	6	7	4	27.57	9	5	6	28.3	28.45	7	4	6	29.1	29.32	6	4	6	26.6	26.0	0.20	4	3	30°	7	7	26.23	2	6	7	6	27.10	20.1	6	7	4	27.57	9	5	6	28.3	28.45	7	4	6	29.1	29.32	6	4	6	26.6	26.0	0.20	4	3		
31°	9	26.1	26.49	4	7	9	9	27.36	3	16.6	8	8	28.24	21.1	5	5	8	6	29.11	9	18.4	8	5	29.58	8	4	7	0	4	0.45	6	3	31°	9	26.1	26.49	4	7	9	9	27.36	3	16.6	8	8	28.24	21.1	5	5	8	6	29.11	9	18.4	8	5	29.58	8	4	7	0	4	0.45	6	3
32°	22.1	4	27.16	6	15.7	23.0	27.3	28.3	3	5	6	24.0	28.1	28.50	3	17.6	25.0	29.0	29.37	22.1	5	26.0	9	0.24	23.0	19.4	9	7	11	8	20.4	32°	22.1	4	27.16	6	15.7	23.0	27.3	28.3	3	5	6	24.0	28.1	28.50	3	17.6	25.0	29.0	29.37	22.1	5	26.0	9	0.24	23.0	19.4	9	7	11	8	20.4		
33°	2	8	27.44	9	8	2	7	28.30	7	7	2	5	29.17	6	6	2	4	0	4	4	5	1	0	2	0.50	2	5	27.1	1.1	137	24.0	4	33°	2	8	27.44	9	8	2	7	28.30	7	7	2	5	29.17	6	6	2	4	0	4	4	5	1	0	2	0.50	2	5	27.1	1.1	137	24.0	4
34°	4	27.2	28.12	20.1	8	4	28.1	28.58	9	7	3	9	29.44	8	7	4	8	0.31	6	6	3	6	117	4	5	3	5	2	4	2	4	34°	4	27.2	28.12	20.1	8	4	28.1	28.58	9	7	3	9	29.44	8	7	4	8	0.31	6	6	3	6	117	4	5	3	5	2	4	2	4		
35°	6	6	28.40	4	9	6	5	29.26	21.2	16.8	5	29.3	0.12	22.0	7	5	0.2	0.58	8	18.6	5	1.0	144	6	5	5	9	23.0	4	5	35°	6	6	28.40	4	9	6	5	29.26	21.2	16.8	5	29.3	0.12	22.0	7	5	0.2	0.58	8	18.6	5	1.0	144	6	5	5	9	23.0	4	5				
36°	8	28.0	29.9	6	9	8	9	29.54	4	8	7	7	0.40	2	7	7	6	126	23.0	6	7	7	212	8	6	7	2.4	25.8	6	5	36°	8	28.0	29.9	6	9	8	9	29.54	4	8	7	7	0.40	2	7	7	6	126	23.0	6	7	7	212	8	6	7	2.4	25.8	6	5				
37°	23.0	5	29.38	8	16.0	24.0	29.3	0.23	6	9	9	0.2	1	9	4	17.8	9	1.0	154	2	7	9	9	24.0	24.0	19.6	9	8	3.25	8	20.5	37°	23.0	5	29.38	8	16.0	24.0	29.3	0.23	6	9	9	0.2	1	9	4	17.8	9	1.0	154	2	7	9	9	24.0	24.0	19.6	9	8	3.25	8	20.5		
38°	2	9	0	7	21.0	0	2	8	0.53	8	9	25.1	6	1.38	6	8	26.1	5	2.23	4	7	27.1	2.4	3	8	2	7	28.1	3.2	3.53	25.0	6	38°	2	9	0	7	21.0	0	2	8	0.53	8	9	25.1	6	1.38	6	8	26.1	5	2.23	4	7	27.1	2.4	3	8	2	7	28.1	3.2	3.53	25.0	6
39°	4	29.4	0.38	2	1	4	0.3	1.22	22.0	17.0	3	1.1	2	7	8	9	3	2.0	2.52	6	18.8	3	8	3.37	4	7	3	7	4.22	2	6	39°	4	29.4	0.38	2	1	4	0.3	1.22	22.0	17.0	3	1.1	2	7	8	9	3	3	2.0	2.52	6	18.8	3	8	3.37	4	7	3	7	4.22	2	6	
40°	6	9	1	8	5	1	6	8	1.53	3	0	6	6	2.37	23.1	9	5	5	3.22	9	8	5	5	3.3	4	6	7	7	5	4.51	5	6	40°	6	9	1	8	5	1	6	8	1.53	3	0	6	6	2.37	23.1	9	5	5	3.22	9	8	5	5	3.3	4	6	7	7	5	4.51	5	6
41°	8	0.4	1.40	7	2	8	1.3	2.24	5	1	8	2.1	3	8	3	18.0	8	3.0	3.52	24.1	9	7	8	4.36	9	19.8	7	6	5	20.7	41°	8	0.4	1.40	7	2	8	1.3	2.24	5	1	8	2.1	3	8	3	18.0	8	3.0	3.52	24.1	9	7	8	4.36	9	19.8	7	6	5	20.7				
42°	24.0	9	2	11	22.0	16.2	25.0	8	2.55	8	1	26.0	6	3																																																			

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.	SID. T. 1 21 21					H. M. S. 1 25 6					H. M. S. 1 28 52					H. M. S. 1 32 38					H. M. S. 1 36 25					H. M. S. 1 40 12							
	22°	22°	22°	22°	22°	23°	23°	23°	23°	23°	24°	24°	24°	24°	24°	24°	24°	24°	24°	24°	25°	25°	25°	25°	25°	25°	25°	25°	25°				
Lat.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3			
°	8	II	25	8	II	8	II	25	8	II	8	II	25	8	II	8	II	25	8	II	8	II	25	8	II	8	II	8	II				
°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
22	25.4	27.3	27	5	21.9	20.1	26.3	28.2	27	55	22.8	21.0	27.3	29.0	28	45	23.7	22.0	28.2	29.9	29	34	24.5	23.0	29.1	0.8	0.24	25.4	24.0	0.1	1.6	1 14 26.3	24.9
23	5	6	27	29	22.1	1	5	5	28	18	9	1	4	4	29	8	8	0	3	0.2	29	57	7	0	3	1.1	0.46	6	0	2	9	136	5 9
24	7	9	27	53	3	1	6	8	28	42	23.1	1	5	7	29	31	24.0	1	5	5	0.20	9	0	4	4	1	9	8	0	4	2.3	159	7 25.0
25	8	28.3	28	17	5	2	8	29.1	29	6	3	1	7	25	54	2	1	6	9	0.43	25.1	1	6	7	132	9	0	5	6	222	8	0	
26	26.0	6	28	41	7	2	9	5	29	30	5	1	8	0.3	0.18	4	1	8	1.2	1	7	3	1	7	2.1	156	26.1	0	7	9	245	27.0	0
27	1	9	29	5	8	20.2	27.1	8	29	54	7	21.2	28.0	7	0.42	6	22.1	29.0	5	1.31	4	23.1	9	4	219	324.0	9	3.2	3	8	2	0	
28	3	29.3	29	30	23.0	2	2	0.1	0.18	9	2	1	1.0	1	6	7	1	1	9	1.54	6	1	II	0.1	7	243	5	1	1.0	6	331	4	0
29	4	6	29	55	2	3	4	5	0.43	24.1	2	3	4	1.31	9	2	3	2.2	219	8	1	2	3.1	3	7	7	1	2	9	355	5 25.0		
30	26.6	25	0.20	4	3	5	9	1	8	3	3	5	7	155	25.1	2	4	6	243	26.0	2	4	4	3	31	8	1	4	4.3	419	7	1	
31	7	0.4	0.45	6	3	7	1.2	1	33	5	3	7	2.1	220	3	2	6	9	3.8	2	2	6	8	355	27.0	1	5	7	443	9	1		
32	9	7	111	8	20.4	9	6	1	58	7	21.3	8	4	245	5	22.2	8	3.3	332	4	23.2	8	4.2	420	224.1	7	5.0	5	7	28.1	1		
33	27.1	1.1	137	24.0	4	28.1	2.0	2	24	9	3	29.0	8	311	7	3	II	7	358	6	2	1.0	5	445	4	2	9	4	532	2	1		
34	3	5	2	4	2	4	2	4	25.0	25.1	4	2	3.2	337	9	3	0.2	4.1	423	7	2	1	9	510	6	2	2.1	8	557	4 25.1			
35	5	9	230	4	5	4	8	3	17	3	4	4	6	4	326.1	3	4	5	449	9	3	3	5.3	536	8	2	3	6.2	622	6	1		
36	7	2.4	258	6	5	6	3.2	3	43	5	4	6	4.0	430	3	3	6	9	516	27.1	3	5	7	6	228.0	2	5	6	648	8	2		
37	9	8	325	8	20.5	8	6	411	6	21.5	8	4	457	5	22.4	8	5.3	542	3	23.3	7	6.1	628	224.2	7	7.0	714	29.0	2				
38	28.1	3.2	353	25.0	6	29.0	4.1	438	8	5	II	9	524	7	4	1.0	7	69	6	3	9	6	655	4	3	9	4	740	2	2			
39	3	7	422	2	6	2	5	5	7	26.0	5	0.2	5.4	552	9	4	2	6.2	637	8	4	2.1	7.1	722	6	3	3.1	9	87	4 25.2			
40	5	4.2	451	5	6	5	5.0	535	3	6	4	8	620	27.1	5	4	7	75	28.0	4	4	5	749	8	3	3	8.4	834	6	2			
41	7	6	520	7	20.7	7	5	6	5	6	7	6.3	649	3	5	6	7.1	733	2	4	6	8.0	818	29.0	3	6	8	92	8	3			
42	9	5.1	550	26.0	7	9	6.0	634	8	21.6	9	8	718	5	22.5	9	6	82	4	23.4	8	5	846	224.4	8	9.3	930	3	3				
43	29.2	7	621	2	7	0.2	5	74	27.0	7	1.1	7.4	748	8	6	2.1	8.1	832	7	5	3.1	9.0	915	4	4	4.1	8	959	0.2	3			
44	4	6.2	652	5	8	4	7.0	735	3	7	4	9	818	28.0	6	4	7	92	9	5	4	5	945	6	4	3	10.4	1028	4 25.3				
45	6	8	724	7	20.8	6	6	86	5	7	6	8.5	849	3	6	7	9.2	932	29.1	5	7	10.1	1015	8	4	6	9	1058	6	3			
46	9	7.3	756	27.0	8	9	8.1	838	7	8	9	9.0	921	5	7	9	810	3	3	5	9	71046	0.1	5	9	11.5	1128	8	4				
47	0.2	9	829	3	9	1.2	7	911	9	21.8	2.2	6	953	7	22.7	3.2	10.4	1035	5	23.6	4.2	11.2	1117	324.5	5.2	12.0	1159	1.0	4				
48	5	8.5	93	5	9	5	9.3	945	28.2	8	5	10.2	1026	29.0	7	5	11.0	118	7	6	5	81149	6	5	5	61231	325.4						
49	8	9.2	938	8	21.0	8	10.0	1019	5	9	8	8110	0	3	8	9	61141	7	6	9	12.4	1222	9	5	8	13.2	133	5	4				
50	1.2	8	1014	28.1	0	22	6	1054	8	9	3.2	11.4	1135	6	8	4.2	12.2	1215	0.3	6	5.2	13.0	1256	1.1	5	6.2	81336	8	4				
51	6	10.5	1050	4	1	6	11.3	1130	29.1	9	6	12.1	1210	9	22.8	6	91250	6	7	6	71330	4	6	6	14.5	1410	2.1	5					
52	2.0	11.2	1127	7	1	3.0	12.0	127	4	22.0	4.0	81246	0.2	9	5.0	13.6	1326	9	23.7	6.0	14.4	145	624.6	7.0	15.2	1445	325.5						
53	4	12.0	126	29.0	21.2	4	81244	7	0	413.6	1323	5	9	414.4	142	1.2	7	415.1	1441	9	6	4	91520	6	5								
54	9	81245	3	3	913.6	1323	7	1	914.4	141	823.0	9	15.2	1440	5	8	9	91518	2.2	7	916.7	1557	9	5									
55	3.4	13.7	1325	6	3	4.4	14.5	143	0.3	1	5.4	15.2	1440	1.1	0	6.4	16.0	1517	8	8	7.4	16.7	1556	5	7	8.4	17.5	1634	3.2	5			
56	9	14.6	146	4	6	915.4	1443	7	2	916.1	1521	4	1	9	91558	2.1	9	8.0	17.5	1635	8	7	9.0	18.4	1713	5	6						

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S. SID. T. 1 44 0 ARC 26° 0' 1					H. M. S. 1 47 49 26° 57' 2					H. M. S. 1 51 38 27° 54' 5					H. M. S. 1 55 27 28° 51' 9					H. M. S. 1 59 18 29° 49' 4					H. M. S. 2 3 8 30° 47' 1					
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3
Lat.	II	æ	æ	æ	æ	II	æ	æ	æ	æ	II	æ	æ	æ	æ	II	æ	æ	æ	æ	II	æ	æ	æ	æ	II	æ	æ	æ	æ
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	
22	1.0	2.5	2 4	27.2	25.9	1.9	3.4	2 54	28.1	26.9	2.9	4.2	3 44	29.0	27.9	3.8	5.1	4 35	0.0	28.9	4.8	6.0	5 25	0.9	29.8	5.7	6.8	6 16	1.8	0 8
23	2	8	2 26	4	9	2.1	7	3 16	3	9	3.0	5	4 6	2	9	4.0	4	4 56	1	9	9	3	5 47	1.0	8	8	7.1	6 37	9	8
24	3	3.1	2 48	5	9	2	4.0	3 38	5	9	2	9	4 28	4	9	1	7	5 18	3	9	5.1	6	6 8	2	8	6.0	5	6 58	2.1	8
25	5	5	3 11	7	9	4	3	4 0	6	9	3	5.2	4 50	5	9	3	6.0	5 40	4	9	2	9	6 30	3	8	2	8	7 20	2	8
26	7	8	3 34	9	26.0	6	7	4 23	8	9	5	5	5 12	7	27.9	4	4	6 2	0.6	9	4	7.2	6 51	5	8	3	8.1	7 41	3	8
27	8	4.1	3 56	28.1	0	7	5.0	4 45	9	9	6	8	5 35	8	9	4.6	7	6 24	7	28.9	5	6	7 13	1.6	29.8	6.5	4	8 3	5	0.5
28	2.0	5	4 20	2	0	9	3	5 8	29.1	27.0	8	6.2	5 57	æ	9	8	7.0	6 46	9	9	7	9	7 35	7	8	6	8	8 25	2.6	8
29	1	8	4 43	4	0	3.0	7	5 31	3	0	4.0	5	6 20	0.1	9	9	4	7 9	1.0	9	9	8.2	7 58	9	8	8	9.1	8 47	8	8
30	3	5.2	5 7	6	0	2	6.0	5 55	4	0	2	9	6 43	3	27.9	5.1	7	7 32	2	9	6.1	6	8 20	2.0	8	7.0	5	9 9	9	8
31	5	5	5 31	7	26.0	4	4	6 18	6	0	3	7.2	7 6	5	9	3	8.1	7 55	3	9	2	9	8 43	2	8	2	8	9 31	3.1	8
32	7	9	5 55	9	0	6	7	6 42	8	0	5	6	7 30	6	9	5	4	8 18	5	28.9	4	9.3	9 6	4 29.8	4	10.2	9 54	2	0.8	
33	9	6.2	6 19	29.1	1	8	7.1	7 6	9	27.0	7	8.0	7 54	8	28.0	7	8	8 41	6	9	6	7	9 29	5	8	6	5 10	17	4	8
34	3.1	6	6 44	3	1	4.0	5	7 31	0.1	0	9	3	8 18	1.0	0	9	9.2	9 5	8	9	8 10.0	9 52	7	8	8	9 10	40	5	8	
35	3	7.0	7 9	5	1	2	9	7 55	3	0	5.1	7	8 42	1	0	6.1	6	9 29	2.0	9	7.0	4 10 16	8	8	8.0	11.3	11 3	7	8	
36	5	4	7 34	7	26.1	4	8.3	8 20	5	0	3	9.1	9 7	3	0	3	10.0	9 54	2	9	2	8 10 40	3.0	8	2	7 11	27	9	8	
37	7	8	8 0	9	1	6	7	8 46	6	0	5	5	9 32	4	0	5	4 10 18	3 28.9	4	11.2	11 4	2 29.8	4	12.1	11 5	4	0	0.8		
38	9	8.3	8 26	æ	1	8	9.1	9 12	8 27.1	7 100	9 57	6 28.0	7	8 10 43	5	9	6	7 11 29	4	8	6	5 12 15	1	8	8	9 12 40	3	8		
39	4.1	7	8 52	0.2	1	5.0	6	9 38	1.0	1	6.0	4 10 23	8	0	9 11.3	11 9	7	9	9 12.1	11 54	5	8	8	9 12 40	3	8				
40	3	9.2	9 19	4	2	2	10.0	10 4	2	1	2	9 10 49	2.0	0	7 1	7 11 34	9	9	8.1	5 12 20	7	8	9.0	13.3	13 5	5	8			
41	5	7	9 47	6	26.2	5	4 10 31	4	1	4	11.3	11 16	2	0	4	12.2	12 1	3.1	9	4	13 0	12 46	9	8	3	7 13 31	7	8		
42	8	10.2	10 14	8	2	7	9 10 59	6	1	7	8 11 43	4	0	7	7 12 27	2 28.9	6	5 13 12	4 1 29 8	6 14.2	13 57	8	0.8							
43	5.0	7	10 43	1.0	2	6.0	11.4	11 26	8 27.1	7.0	12.3	12 10	6 28.0	9 13.2	12 55	4	9	9 14.0	13 39	3	8	9	7 14 23	5.0	8					
44	3	11.2	11 12	2	2	3	9 11 55	2.0	1	3	9 12 38	8	0	8.2	7 13 22	6	9	9 2	5 14 6	4	8	10.1	15.2	14 50	2	8				
45	5	7	11 41	4	2	5	12.5	12 24	2	1	5 13.4	13 7	3.0	0	5 14.2	13 50	8	9	4 15.0	14 33	6	8	4	7 15 17	4	8				
46	8	12.3	12 11	6	26.2	8	13.0	12 53	4	1	8	9 13 36	2	0	8	7 14 19	4.0	9	7	5 15 2	8	8	8	7 16.3	15 45	6	8			
47	6.1	9 12 41	8	3	7.1	6 13 23	7	2	8.1	14.5	14 6	4	0	9.1	15.3	14 48	3 28.9	10.0	16.1	15 30	5.0	29.8	11 0	9 16 13	8	0.7				
48	4	13.4	13 12	2.0	3	4	14.2	13 54	9 27.2	4 15.1	14 36	6 28.0	4	9 15 18	5	9	3	7 16 0	2	8	3 17 5	16 42	6 0	7						
49	7	14.0	13 44	3	3	7	8 14 26	3.2	2	8	6 15 7	8	0	7 16.4	15 48	7	9	6 17 2	16 30	4	8	6 18.0	17 11	2	7					
50	7.1	6 14 17	6	3	8.1	15.4	14 58	4	2	9.1	16.2	15 39	4 1	0	10.1	17.0	16 19	9	9	11.0	8 17 0	6	8 12 0	6 17 41	4	7				
51	5	15.3	14 50	8	26.3	5	16.1	15 31	6	2	5	8 16 11	3	1	5	7 16 51	5.1	29.0	4 18.5	17 32	8	8	4 19 2	18 12	6	7				
52	9	16.0	15 25	3.0	4	9	8 16 4	8 27.2	9 17.5	16 41	5 28.1	9 18 4	17 24	3	0	8 19 2	18 4	6 0 29 8	8	9 18 44	8	0 7								
53	8.3	7 16 0	3	4	9.3	17.5	16 39	4.0	2	10.3	18.2	17 18	7	1	11.3	19.1	17 57	6	0 12 3	9 18 37	2	8	13.2	20.6	19 16	7 0	7			
54	8	17.5	16 35	6	4	8	18.2	17 14	3	2	8 19.0	17 52	5.0	1	8	8 18 31	8	0	8 20 6	19 10	5	8	7 21 3	19 49	2	7				
55	9.3	18.3	17 12	9	4	10.3	19.0	17 50	6	2	11.3	8 18 28	3	1	12.3	20.5	19 6	6 1	0 13.3	21.3	19 45	8	8	14.2	22 1	20 23	5	7		
56	9	19.1	17 50	4.2	5	9	8 18 27	9	3	9 20.6	19 5	6	2	9 21.3	19 42	4	0	9 22 1	20 20	7 0	8	8	9 20 58	7	7					

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.									
SID. T. 2 3 8 } 5				2 7 0 } 8 4°				2 10 52 } 8 5°				2 14 44 } 8 6°				2 18 37 } 8 7°				2 22 31 } 8 8°									
ARC 30° 47' 1 } 3°				31° 44' 9 }				32° 42' 9 }				33° 41' }				34° 39' 4 }				35° 37' 8 }									
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3				
Lat.	□	西北	西北	西北	西北	□	西北	西北	西北	西北	□	西北	西北	西北	西北	□	西北	西北	西北	西北	□	西北	西北	西北	西北				
°	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
22	5.7	6.8	6.16	1.8	0.8	6.7	7.7	7	7	2.7	1.8	7.6	8.6	7.58	3.6	2.8	8.6	9.5	8.49	4.5	3.8	9.5	10.4	9.41	5.5	4.8			
23	8	7.1	6.37	9	8	S	S.0	7.28	8	8	8	9	8.19	8	8	7	8	9.10	7	8	6	7	10.10	1	6	8	6		
24	6.0	5	6.58	2.1	8	7.0	3	7.49	3.0	8	9	9.2	8.40	9	8	9.10.1	9.30	8	8	S	11.0	10.21	7	8	7	8	11.12		
25	2	8	7.20	2	8	2	6	8.10	1	8	8.1	5	9.0	4.0	8	9.0	4	9.51	9	8	10.0	3.10.42	8	8	9	12.1	11.32		
26	3	8.1	7.41	3	8	3	9.0	8.31	2	8	2	8	9.21	1	8	2	7	10.12	5.1	8	1	6.11	2	6.0	7	11.1	5.11.53		
27	6.5	4	8.3	5	0.8	5	3	8.53	4	1.8	4	10.2	9.43	3	2.8	4	11.0	10.32	2	3.7	3	9.11.23	1	4.7	2	8	12.13		
28	6	8	8.25	2.6	8	6	6	9.14	3.5	8	6	5.10	4	4	8	5	4	10.53	3	7	5	12.2	11.43	2	7	4	13.1	12.33	
29	8	9.1	8.47	8	8	S.10.0	9.36	7	8	8	8	S.10.25	4.6	8	7	7	11.14	5	7	6	6.12	4	3	7	6	4	12.54		
30	7.0	5	9.9	9	8	8.0	3	9.58	8	8	9.11.2	10.47	7	7	9	12.0	11.36	5.6	7	8	9.12.25	6.5	7	8	8	13.14	4		
31	2	8	9.31	3.1	8	2	7	10.20	9	8	9.1	5.11	9	8	7	10.1	4.11.57	7	7	11.0	13.2	12.46	6	7	9	14.1	13.35	7.5	
32	4	10.2	9.54	2	0.8	4	11.0	10.42	4.1	1.8	3	9.11.31	5.0	2.7	2	7	12.19	9	3.7	2	6.13	8	7	4.7	12.1	4	13.56	6	
33	6	5	10.17	4	8	5	4.11	5	2	8	5	12.2	11.53	1	7	4	13.1	12.41	6.0	7	4	9.13.29	9	6	3	8	14.18	8	
34	8	9.10.40	5	8	7	S.11.28	4	8	7	6.12.15	3	7	6	5.13	3	1	7	6.14.3	13.51	7.0	6	5	15.2	14.39	9	6			
35	S.0	11.3	11.3	7	8	9.12.2	11.51	6	7	9.13.0	12.38	4	7	8	9.13.25	3	6	8	7.14.13	2	6	7	6.15	1	8.0				
36	2	7	11.27	9	8	9.1	6.12	14	7	7	10.1	4.13	1	5.6	7	11.0	14.3	13.48	4	6	12.0	15.1	14.35	3	6	9	9.15.23	2	
37	4	12.1	11.51	4.0	0.8	3	13.0	12.38	9	1.7	3	8.13.24	7	2.7	2	7	14.11	6.6	3.6	2	5.14.58	5	4.6	13.1	16.3	15.45	3		
38	6	5	12.15	1	8	6	4.13	2	5.0	7	5	14.2	13.48	9	7	5	15.1	14.34	8	6	4	9.15.21	7.6	6	3	7	16.8	4	
39	8	9.12.40	3	8	8	S.13.26	2	7	7	6.14.12	6.1	7	7	5.14.58	9	6	6.16.3	15.44	8	5	6	17.2	16.31	8.5	5				
40	9.0	13.3	13.5	5	5	S.10.0	14.2	13.51	4	7	11.0	15.1	14.36	2	7	9	9.15.22	7.0	6	9	7.16	8	9	5	8	6.16.54	7		
41	3	7	13.31	7	8	3	7	14.16	6	7	2	5.15	1	4	6	12.2	16.3	15.46	1	6	13.1	17.2	16.32	8.1	5	14.1	18.0	17.17	8
42	6	14.2	13.57	8	0.8	5	15.1	14.41	8	1.7	5	16.0	15.26	6	2.6	4	8.16.11	3	3.5	4	6.16.56	2	4.5	3	5	17.41	9.0		
43	9	7	14.23	5.0	8	8	6.15	7	9	7	8	4.15	52	8	6	7	17.3	16.36	5	5	5	7.18.1	17.21	4	5	6	9.18	5	
44	10.1	15.2	14.50	2	8	11.1	16.1	15.34	6.1	7	12.1	9.16	18	9	6	13.0	7.17	2	7	5	14.0	6.17	46	5	4	9.19.4	18.30		
45	4	7	15.17	4	8	4	6.16	0	2	7	4	17.4	16.44	7.0	6	3	18.2	17.28	8	5	3	19.1	18.12	6	4	15.2	9.18.55	5	
46	7	16.3	15.45	6	8	7	17.1	16.28	4	7	7	9	17.11	2	6	6	7	17.54	8.0	5	6	6	18.38	7	4	5	20.4	19.21	
47	11.0	9	16.13	8	0.7	12.0	7	16.56	6	1.7	13.0	18.5	17.38	4	2.6	9	19.3	18.21	1	3.5	9	20.1	19.4	9	4.4	8	9.19.47	8	
48	3	17.5	16.42	6.0	7	3	18.2	17.24	8	6	3	19.0	18.6	5	6	14.2	8.18	48	3	4	15.2	7.19	31	9.1	3	16.1	21.5	20.14	
49	6	18.0	17.11	2	7	6	8	17.53	7.0	6	6	6	18.35	7	5	5	20.4	19.16	5	4	5	21.2	19.58	3	3	4	22.0	20.41	2
50	12.0	6	17.41	4	7	13.0	19.4	18.22	2	6	9	20.2	19.4	9	5	9	21.0	19.45	7	4	8	8.20	27	5	3	8	6.21	8	
51	4	19.2	18.12	6	7	4	20.0	18.53	4	6	14.3	8.19	33	8.1	5	15.3	6.20	14	9	4	16.2	22.4	20.55	7	3	17.2	23.2	21.36	4
52	8	9	18.44	8	0.7	8	7	19.24	6	1.6	7	21.5	20.4	3	2.5	7	22.3	20.44	9.1	3.4	6	23.0	21.25	9	4.2	6	8.22	5	
53	13.2	20.6	19.16	7.0	7	14.2	21.4	19.55	8	6	15.2	22.2	20.35	5	5	16.1	9.21	15	3	3	17.1	7.21	15.5	10.1	2	18.0	24.4	22.35	8
54	7	21.3	19.49	2	7	7	22.1	20.28	8.0	6	7	9	21.7	7	5	6	23.6	21.47	5	3	6	24.4	22.26	3	2	4	25.1	23.5	11.0
55	14.2	22.1	20.23	5	7	15.2	8.21	1	3	6	16.2	23.6	21.40	9.0	4	17.1	24.3	22.19	7	3	18.1	25.1	22.58	5	2	19.0	8.23	36	2
56	8	9	20.58	7	7	8	23.6	21.36	5	6	8	24.4	22.14	2	4	7	25.0	22.52	9	3	7	8.23	30	8	1	5	26.5	24.8	4

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.							
SID. T. 2 26 26 } 8					2 30 21 } 8 10°					2 34 17 } 8 11°					2 38 14 } 8 12°					2 42 11 } 8 13°							
ARC 36° 36' 5 } 9°					37° 35' 3 }					38° 34' 3 }					39° 33' 4 }					40° 32' 8 }							
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3		
Lat.	II	25	Q	吸	△	II	25	Q	吸	△	II	25	Q	吸	△	II	25	Q	吸	△	II	25	Q	吸	△		
o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o		
22	11.3	12.1	11.25	7.3	6.8	12.3	13.0	12.17	8.3	7.8	13.2	13.9	13.9	9	9.2	8.8	14.1	14.8	14.1	10.2	9.8	15.1	15.7	14.54	11.1	10.8	
23	5	4	11.44	4	8	4	3	12.36	4	8	4	14.2	13.28	3	8	3	15.1	14.20	3	8	2	16.0	15.12	2	8	2	
24	7	7	12.4	6	7	6	6	12.55	5	7	5	5	13.47	4	8	5	4	14.39	4	7	4	3	15.30	3	7	3	
25	8	13.0	12.23	7	7	8	9	13.14	6	7	7	8	14.6	5	7	6	7	14.57	5	7	5	6	15.49	4	7	5	
26	12.0	3	12.43	8	7	9	14.2	13.34	8.7	7	9	15.1	14.25	9.6	7	8	16.0	15.16	10.6	7	7	9	16.8	5	7	6	
27	2	6	13.3	9	6.7	13.1	5	13.54	8	7.7	14.0	4	14.44	8	8.7	15.0	3	15.35	7	9.7	9	17.2	16.26	11.6	10.7	8	
28	3	14.0	13.23	8.0	7	3	8	14.13	9	7	2	7	15.4	9	6	1	6	15.54	8	6	16.1	5	16.45	7	6	17.0	
29	5	3	13.43	2	6	4	15.2	14.33	9.1	6	4	16.0	15.23	10.0	6	3	9	16.14	9	6	2	8	17.4	8	6	2	
30	7	6	14.4	3	6	6	5	14.53	2	6	6	4	15.43	1	6	5	17.2	16.33	11.0	6	4	18.1	17.23	9	5	3	
31	9	15.0	14.24	4	6	8	8	15.14	3	6	7	7	16.3	2	6	7	6	16.53	1	5	6	4	17.42	12.0	5	5	
32	13.1	3	14.45	8.5	6.6	14.0	16.2	15.34	4	7.6	9	17.0	16.23	3	8.5	9	9	17.13	2	9.5	8	8	18.2	1	10.5	7	
33	3	7	15.6	7	6	2	5	15.55	9.5	5	5	15.1	4	16.43	4	5	16.1	18.3	17.33	3	5	17.0	19.1	18.21	2	4	9
34	5	16.0	15.27	8	5	4	9	16.16	6	5	3	7	17	4	10.5	5	3	6	17.53	4	4	2	5	18.41	3	4	18.1
35	7	4	15.49	9	5	6	6	17.3	16.37	8	5	5	18.1	17.25	7	4	5	19.0	18.13	11.5	4	4	9	19.1	1	4	4
36	9	8	16.10	9.1	5	8	6	16.58	9	5	7	5	17.46	8	4	7	4	18.34	7	9.4	6	20.2	19.22	12.5	3	5	
37	14.1	17.2	16.32	2	6.5	15.0	18.0	17.20	10.0	7.4	9	9	18.7	9	8.4	9	7	18.55	8	3	8	6	19.42	7	10.3	8	
38	3	6	16.55	3	4	2	4	17.41	1	4	16.2	19.3	18.29	11.0	3	17.1	20.1	19.16	9	3	18.0	21.0	20.3	8	2	19.0	
39	5	18.0	17.17	5	4	5	8	18.4	2	4	4	7	18.50	2	3	3	5	19.37	12.0	3	3	3	4	20.24	9	2	2
40	8	4	17.40	9.6	4	7	19.3	18.26	4	3	6	20.1	19.12	3	3	6	9	19.59	2	9.2	5	8	20.45	13.0	2	5	
41	15.0	9	18.3	8	4	16.0	7	18.49	10.5	7.3	9	5	19.35	4	8.2	8	21.4	20.21	3	2	8	22.2	21.7	1	1	7	
42	3	19.3	18.26	9	6.3	2	20.1	19.12	6	3	17.2	21.0	19.58	11.6	2	18.1	8	20.43	4	1	19.0	6	21.29	3	10.1	20.0	
43	5	8	18.50	10.1	3	5	6	19.36	8	2	4	4	20.21	7	2	2	4	22.2	21.6	12.5	1	3	23.1	21.51	4	0	2
44	8	20.2	19.15	2	3	8	21.1	19.59	9	2	7	9	20.44	8	1	7	7	21.29	6	9.1	6	5	22.14	13.5	0	5	24.4
45	16.1	7	19.39	3	2	17.1	6	20.24	11.1	7.2	18.0	22.4	21.8	9	8.1	19.0	23.2	21.52	7	0	9	24.0	22.37	6	0	8	
46	4	21.2	20.5	4	2	4	22.1	20.48	2	1	3	9	21.32	12.1	1	3	7	22.16	9	0	20.2	5	23.0	7	9.9	21.1	
47	8	8	20.30	10.6	6.2	7	6	21.13	4	1	6	23	4	21.57	2	0	6	24.2	22.40	13.0	0	5	25.0	23.24	8	9	4
48	17.1	22.3	20.56	8	2	18.0	23.1	21.39	6	1	19.0	9	22.22	4	0	9	7	23.5	2	8.9	8	4	23.48	14.0	9	8	26.2
49	4	9	21.23	9	1	3	6	22.5	7	7.1	3	24	4	22.48	5	7.9	20.3	25.2	23.30	3	9	21.1	9	23.13	1	8	22.1
50	7	23.4	21.50	11.1	1	7	24.2	22.32	9	0	6	9	23.14	7	9	6	7	23.56	5	9	5	26.5	24.38	3	8	27.3	
51	18.1	24.0	22.18	3	1	19.1	8	22.59	12.1	0	20.0	25.5	23.41	9	9	21.0	26.3	24.23	13.6	8	9	27.1	25.4	4	4	27.546	
52	5	6	22.46	4	6.1	5	25.4	23.27	2	0	4	26.1	24.8	13.0	8	4	9	24.50	7	8.8	22.4	7	25.30	11.5	7	11.8	
53	19.0	25.2	23.15	6	0	9	26.0	23.56	3	6.9	9	7	24.36	1	7.8	9	27.5	25.17	8	7	8	28.3	25.57	6	6	29.1	
54	5	9	23.45	8	0	20.4	6	24.25	5	9	21.4	27.4	25.5	3	8	22.3	28.1	25.45	14.0	7	23.3	9	26.25	8	6	24.2	
55	20.0	26.6	24.16	12.0	0	9	27.3	24.55	7	9	9	28.1	25.34	5	7	8	26.13	2	6	8	29.0	26.53	15.0	7	0.3		
56	6	27.3	24.47	2	5.9	21.5	28.0	25.25	9	8	22.4	8	26.4	7	7	23.4	29.5	26.43	4	5	24.4	0.3	27.22	2	5	25.3	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																				
SID. T.	2 46 9	2 50 8	2 54 7	2 58 7	3 2 8	3 6 10																								
ARC	41° 32' 23"	14°	42° 32' 0"	43° 31' 8"	44° 31' 9"	45° 32' 1"	46° 32' 5"																							
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	II	25	8	III	25	II	25	8	III	25	II	25	8	III	25	II	25	8	III	25	II	25	8	III	25	II	25	8		
22	16.0	16.5	15 47	12.1	11.8	16.9	17.4	16 40	13.0	12.8	17.9	18.3	17 33	14.0	13.8	18.8	19.2	18 27	14.9	14.9	19.7	20.1	19 20	15.9	15.9	20.7	21.0	20 14	16.9	16.9
23	2	8	16 5	1	8	17.1	7	16 57	1	8	18.0	6	17 51	1	8	19.0	5	18 44	15.0	8	9	4	19 37	16.0	8	8	3	20 31	9	8
24	3	17.1	16 23	2	7	2	18.0	17 15	2	8	2	9 18	8	1	8	1	8	19 1	1	8	20.1	7	19 54	0	8	21.0	6	20 48	17.0	8
25	5	4	16 41	3	7	4	3	17 33	3	7	3	19.2	18 26	2	7	3	20.1	19 18	2	7	2	21.0	20 11	1	7	2	9 21	4	1	7
26	6	7	16 59	4	7	6	6	17 51	13.4	7	5	5	18 43	14.3	7	4	4	19 35	3	7	4	3	20 28	2	7	3	32.2	21 21	1	7
27	8	18.0	17 18	12.5	11.6	7	9 18	9	4	12.6	7	8 19	1	4	13.6	6	7 19 53	15.3	14.6	6	6	6 20 45	3	15.6	5	5	21 38	2	16.6	
28	17.0	4	17 36	6	6	9	19.2	18 27	5	6	9	20.1	19 19	5	6	8	21.0	20 10	4	6	7	9 21	2	16.3	6	7	8 21 55	17.3	6	
29	2	7	17 55	7	6	18.1	6	18 46	6	6	19.0	4	19 37	6	5	20.0	3	20 28	5	5	5	9 22.2	21 20	4	5	9 23.1	22 12	4	5	
30	3	19 0	18 13	8	5	3	9 19	4	13.7	5	2	8 19 55	14.7	5	2	6 20 46	6	5 21.1	5 21 37	5	5	5 22.0	4 22 29	4	5					
31	5	3	18 32	9	5	5	20.2	19 23	8	12.5	4	21.1	20 13	7	13.5	3	22.0	21 4	15.7	4	3	8 21 55	6	4	2	7 22 46	5	4		
32	7	7	18 52	13.0	11.4	7	5 19 41	9	4	6	4	20 32	8	4	5	3 21 22	7	14.4	5 23.2	22 12	16.7	15.4	4	24.1	23 3	6	16.4			
33	9	20.0	19 11	1	4	9	9 20	0	14.0	4	8	7 20 50	9	4	7	6 21 40	8	3	7	5 22 30	7	3	6	4 23 21	17.7	3				
34	18.1	3	19 30	2	4	19.1	21.2	20 20	1	4	20.0	22.1	21 9	15.0	3	9 23.0	21 59	9	3	9	8 22 48	8	3	8	7 23 38	7	3			
35	3	7	19 50	3	3	3	6 20 39	2	12.3	2	5 21 28	1	13.3	21.1	3	3 22 17	16.0	2	22.1	24.2	23 7	9	2	23.0	25.1	23 56	8	2		
36	5	21.1	20 10	4	3	5	22.0	20 59	3	3	4	8 21 47	2	2	3	7 22 36	1	2	3	5 23 25	17.0	15.2	2	4	24 14	9 16.1				
37	8	5	20 30	13.5	11.2	7	3 21 18	4	2	6 23.2	22 7	3	2	5	24.0	22 55	2	14.1	5	9 23 44	1	1	4	8 24 32	18.0	1				
38	19.0	9	20 51	6	2	9	7 21 38	14.5	2	8	6 22 26	4	1	8	3 23 14	3	1	7 25.3	24 3	2	1	6 26.2	24 51	1	0					
39	2	22.3	21 12	8	2	20.1	23.1	21 59	6	12.1	21.1	24.0	22 46	15.5	13.1	22.0	7 23 34	4	0	9	7 24 22	3	0	9	5 25 10	1	0			
40	5	7	21 33	9	1	4	4 22 20	7	1	3	4 23 7	6	0	2 25.1	23 54	16.5	0	23.2	26.1	24 41	17.3	14.9	24.1	9 25 29	2	15.9				
41	7	23.1	21 54	14.0	11.1	6	8 22 40	9	0	6	8 23 27	7	0	5	5 24 14	6 13.9	4	5 25 1	4	9	4 27.3	25 48	18.3	8						
42	20.0	5	22 15	1	0	9	24.3	23 1	15.0	0	8 25.2	23 48	8	0	8	9 24 34	7	9	7	9 25 21	5	8	6	7 26 7	4	8				
43	2	9 22 37	2	0	21.2	7 23 23	1	11.9	22.1	6 24 9	9 12.9	23.0	26.3	24 54	8	8 24.0	27.3	25 41	6	8	9 28.1	26 27	5	7						
44	5	24.4	22 59	3	0	5	25.2	23 44	2	9	4 26.1	24 30	16.0	9	3	8 25 15	9	8	2	7 26 1	17.7	14.7	25.2	6 26 47	6	7				
45	8	9 23 22	4	10.9	8	7 24 6	3	9	7	5 24 51	1	8	6 27.2	25 37	17.0	7	5 28.2	26 22	7	7	5 29.0	27 7	18.7	15.6						
46	21.1	25.3	23 45	14.5	9	22.1	26.1	24 29	15.4	8 23.0	27.0	25 13	2	8	9 7 25 58	1 13.7	8	6 26 43	8	6	8	4 27 28	8	6						
47	4	8 24 8	6	8	4	6 24 52	5	8	3	5 25 36	3	7	24.2	28.2	26 21	1	6 25.2	29.1	27 5	9	6 26.1	8 27 49	9	5						
48	8 26.2	24 32	8	8	7 27.0	25 15	6 11.7	6	9 25 59	4 12.7	6	7 26 42	2	6	5	5 27 26	18.0	14.5	5	0 3 28 10	9	5								
49	22.1	7 24 56	9	10.7	23.1	5 25 39	7	7 24.0	28.4	26 22	16.5	6	9 29.2	27 5	3	5	8 27 49	1	5	9	8 28 32	19.0	4							
50	5	27.3	25 21	15.1	7	4 28.1	26 3	9	6	4 9 26 46	7	6 25.3	7 27 28	17.5	5	26.2	0.5 28 11	3	4 27.2	1.3 28 54	1	15.4								
51	9	9 25 46	2	6	S	7 26 28	16.0	6	7 29.4	27 10	8	5	7 0.2 27 52	6 13.4	6	1.0 28 34	4	3	6	8 29 17	2	3								
52	23.3	28.5	26 12	3	6 24.2	29.3	26 53	1	11.5	25.1	S 27 35	9 12.5	26.1	8 28 16	7	3 27.0	6 28 58	18.5	14.2	28.0	2.3 29 40	3	2							
53	7 29.1	26 38	4 10.5	6	9 27 19	2	5	6	0.6 28 0	17.0	4 12.7	4 28 41	8	3 2	4 2.2 29 22	6	2	4	9 0 3 19.4	1										
54	24.2	7 27 5	6	5 25.1	0.5 27 45	16.3	4 26.1	1.2 28 26	1	3 27.0	2.0 29 6	9	2	9	8 29 47	7	1	9 3.5	0 28 5	5	0									
55	7	0.3 27 33	8	4	6	1.1 28 12	5	3	6	9 28 52	3 2	5	6 29 32	18.1	1 28.4	3.4 0 12	9	0 29.4	4.1 0 52	6 14.9										
56	25.3	1.0 28 1	16.0	4 26.2	8 28 40	7	3 27.1	2.6 29 19	4	1 28.0	3.3 29 55	3	0 29.0	4.0 0 38	19.0	13.9	9	8 1 18	8	8										

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.										H. M. S.										H. M. S.										H. M. S.									
SID. T. 3 10 12					3 14 16					3 18 19					3 22 24					3 26 29					3 30 35					H. M. S.					H. M. S.				
ARC 47° 33'.1					20°					48° 33'.9					49° 34'.8					50° 36'.0					51° 37'.3					52° 38'.8									
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3				
Lat.	II	25	Q	W	S	II	25	Q	W	S	II	25	Q	W	S	II	25	Q	W	S	II	25	Q	W	S	II	25	Q	W	S	II	25	Q	W	S				
22°	21.6	21.9	21	9	17.8	17.9	22.6	22.8	22	3	18.8	18.9	23.5	23.7	22.58	19.8	20.0	24.4	24.7	23.53	20.8	21.0	25.4	25.6	24.45	21.8	22.0	26.3	26.5	25.43	22.8	23.1							
23	8	22.2	21	25	9	9	7	23.1	22	19	9	9	7	24.0	23	13	8	19.9	6	25.0	24	8	8	20.9	5	9.25	3	8	0	5	8	25.58	8	0					
24	9	5	21	41	18.0	8	9	4	22	35	9	8	8	3	23	29	9	9	8	2	24	23	9	9	7	26.2	25	18	9	21.9	6	27.1	26	12	8	22.9			
25	22.1	8	21	57	0	8	23.0	7	22	51	19.0	8	24.0	6	23	45	20.0	8	9	5	24	39	9	8	9	4	25	33	9	8	8	4	26	27	9	9			
26	3	23.1	22	14	1	7	2	24.0	23	7	1	7	1	9	24	0	0	7	25.1	8	24	54	21.0	7	26.0	7	25	48	22.0	8	27.0	6	26	42	9	8			
27	4	4	22	30	2	17.7	4	3	23	23	1	18.7	3	25.2	24	16	1	19.7	3	26.1	25	9	0	7	2	27.0	26	3	0	7	2	9	26	56	23.0	7			
28	6	7	22	47	2	6	6	6	23	39	2	6	5	5	24	32	1	6	4	4	25	25	1	20.6	4	3	26	18	0	7	3	28.2	27	11	0	7			
29	8	24.0	23	3	3	5	7	9	23	56	2	5	7	8	24	48	2	6	6	7	25	40	1	6	6	6	26	33	1	21.6	5	5	27	26	0	22.6			
30	23.0	3	23	20	18.4	5	9	25.2	24	12	19.3	5	9	26.1	25	4	20.2	5	8	27.0	25	56	2	5	7	9	26	48	1	5	7	8	27	41	1	5			
31	2	6	23	37	4	17.4	24.1	5	24	29	4	18.4	25.0	4	25	20	3	19.4	26.0	3	26	12	21.2	4	9	28.2	27	4	2	4	9	29.1	27	56	1	5			
32	4	9	23	54	5	4	3	8	24	45	4	4	2	7	25	36	4	4	2	6	26	28	3	4	27.1	5	27	19	22.2	4	28.1	4	28	11	23.2	4			
33	5	25.2	24	11	6	3	5	26.1	25	2	5	3	4	27.0	25	53	4	3	4	9	26	44	3	20.3	3	8	27	35	3	3	3	7	28	26	2	3			
34	7	6	24	29	6	2	7	5	25	19	6	2	6	3	26	9	5	2	6	28.2	27	0	4	2	5	29.1	27	51	3	21.2	5	Q	28	42	2	22.2			
35	9	9	24	46	18.7	17.2	9	8	25	36	19.6	18.2	8	7	26	26	5	19.2	8	6	27	16	4	2	7	5	28	7	4	2	7	0	4	28	57	3	2		
36	24.2	26.3	25	4	8	1	25.1	27.2	25	53	7	1	26.0	28.0	26	43	20.6	1	27.0	9	27	33	21.5	1	9	8	28	23	4	1	9	7	29	13	3	1			
37	4	6	25	21	9	1	3	5	26	11	8	0	2	4	27	0	7	0	2	29.3	27	49	6	0	28.1	0	1	28	39	5	0	29.1	1	0	29	29	23.4	0	
38	6	27.0	25	39	9	0	5	9	26	28	8	0	5	7	27	17	7	0	4	6	28	6	6	19.9	3	5	28	55	22.5	20.9	3	4	29	45	4	21.9			
39	8	4	25	58	19.0	16.9	8	28.2	26	46	9	17.9	7	29.1	27	34	8	18.9	6	Q	28	23	7	9	6	9	29	12	6	8	5	7	0	1	5	8			
40	25.1	7	26	16	1	9	26.0	6	27	4	20.0	8	9	5	27	52	8	8	9	0	3	28	40	21.7	8	8	1	2	29	29	6	8	8	21	0	17	5	8	
41	3	28.1	26	35	2	8	3	29.0	27	23	0	8	27.2	9	28	10	9	7	28.1	7	28	58	8	7	29.1	6	29	46	7	7	Q	5	0	34	23.6	7			
42	6	5	26	54	3	7	5	4	27	41	1	7	5	0.3	28	28	21.0	6	4	1.1	29	15	9	6	3	2.0	0	3	22.7	6	0.3	9	0	51	6	6			
43	8	29.0	27	13	19.3	7	8	8	28	0	2	6	7	7	28	47	1	6	7	5	29	33	9	19.5	6	4	0	20	8	20.5	5	3	3	1	8	7	21.5		
44	26.1	4	27	33	4	16.6	27.1	0.2	28	19	3	17.6	28.0	1.1	29	5	1	18.5	9	9	29	52	22.0	5	9	8	0	38	9	5	8	7	125	7	5				
45	4	8	27	53	5	6	4	7	28	38	20.4	5	3	5	29	24	2	4	29.2	2.4	0	10	1	4	0.2	3.2	0.56	9	4	1.1	4	1	143	23.8	4				
46	7	0.3	28	13	6	5	7	1.1	28	58	4	5	6	9	29	43	3	4	5	8	0	29	1	4	5	7	114	23.0	4	4	4	2	0	8	3				
47	27.0	7	28	33	19.7	5	28.0	5	29	18	5	4	9	2.3	0	3	21.4	3	9	3.2	0	48	2	3	8	4.1	1	33	0	20.3	7	8	218	9	21.2				
48	4	1.1	28	54	8	4	3	2.0	29	39	6	3	29.2	8	0	23	4	18.3	0.2	6	1	7	22.3	19.2	1.1	5	1	52	1	2	2.1	5.3	237	9	1				
49	7	6	29	15	8	16.3	7	4	29	59	20.7	17.2	6	3.3	0	43	5	2	5	4.0	1	27	3	2	5	9	2	11	2	1	4	7	256	240	1				
50	28.1	2.1	29	37	9	3	29.1	9	0	20	8	2	2.0	7	1	4	6	1	9	5	147	4	1	1	9	54	231	2	0	8	6.2	315	1	0					
51	4	6	29	59	20.0	2	5	3.4	0	42	9	1	0.3	4.2	1	25	21	7	0	1.2	5.0	2	8	5	0	2.3	9	251	23.3	199	3.1	7	334	1	209				
52	8	3.1	0	22	1	1	9	9	1	4	9	0	7	7	1	46	8	17.9	6	5	229	6	18.9	7	6.4	3	311	4	8	5	7.2	354	2	8					
53	29.3	7	0	45	2	0	0.3	4.5	1	26	21.0	16.9	1.1	5.2	2	8	9	8	2.0	6.0	2	50	22.7	8	3.1	9	332	4	7	9	7	415	242	7					
54	7	4.3	1	9	3	15.9	7	5.1	1	49	1	8	6	8	2	31	22.0	7	5	6	3.12	7	7	5	7.4	354	5	6	4	4	8.2	435	3	6					
55	0.3	9	1	33	4	8	1.2	7	2	13	2	7	2.1	6.4	2	54	0	6	3.1	7.2	3	35	8	5	4	0	8.0	415	6	4	9	7	457	4	4				
56	8	5.5	1	57	5	7	7	6.3	2	37	3	6	6	7.0	3	17	1	5	6	8	3	57	9	4	5	5	4	38	7	3	54	9.3	518	4	3				

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																				
SID. T.	3 30 35	3 34 42	3 38 49	3 42 57	3 47 6	3 51 16																								
ARC	52° 38'.8	25°	53° 40'.5	54° 42'.3	55° 44'.4	56° 46'.6																								
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	II	26	Q	吸	斯	II	26	Q	吸	斯	II	26	Q	吸	斯	II	26	Q	吸	斯	II	26	Q	吸	斯					
22	26.3	26.5	25.43	22.8	23.1	27.3	27.5	26.39	23.7	24.1	28.2	28.4	27.35	24.8	25.1	29.2	29.4	28.31	25.7	26.2	0.1	0.3	29.27	26.8	27.3	1.1	1.2	0.23	27.8	28.3
23	5	8	25 58	8	0	4	7	26 53	8	0	4	7	27 48	8	1	3	6	28 44	8	1	3	5	29 40	8	2	2	5	0 36	8	3
24	6	27.1	26 12	8	22.9	6	28.0	27 7	8	0	5	9	28 2	8	0	5	9	28 58	8	1	4	8	29 53	8	1	4	7	0 49	8	2
25	8	4	26 27	9	9	8	3	27 21	9	23.9	7	29.2	28 16	8	24.9	7	0.2	29 11	8	0	6	1.1	0 6	8	1	6	2.0	1 2	8	1
26	27.0	6	26 42	9	8	9	6	27 36	9	8	9	5	28 30	24.9	9	8	4	29 25	8	25.9	8	3	0 19	26.8	0	7	3	1 15	8	0
27	2	9	26 56	23.0	7	28.1	8	27 50	9	8	29.0	8	28 44	9	8	25	7	29 38	25.9	9	1.0	6	0 33	9	26.9	9	5	1 27	27.8	27.9
28	3	28.2	27 11	0	7	3	29.1	28 5	24.0	7	2	8	28 58	9	7	0.2	1.0	29 52	9	8	1	9	0 46	9	8	2.1	8	1 40	8	9
29	5	5	27 26	0	22.6	5	4	28 19	0	6	4	0.3	29 12	25.0	7	4	3	0 6	9	7	3	2.1	0 59	9	7	2	3.1	1 53	9	8
30	7	8	27 41	1	5	6	7	28 34	0	23.6	6	6	29 26	0	24.6	5	5	0 20	9	25.6	5	4	1 13	26.9	7	4	4	2 6	9	7
31	9	29.1	27 56	1	5	8	8	28 48	1	5	8	9	29 41	0	5	7	8	0 33	26.0	5	7	7	1 26	9	26.6	6	6	2 19	9	27.6
32	28.1	4	28 11	23.2	4	29.0	0.3	29 3	1	4	25	1.2	29 55	0	4	9	2.1	0 47	0	5	9	3.0	1 40	9	5	8	9	2 33	27.9	5
33	3	7	28 26	2	3	2	6	29 18	24.1	3	0.2	5	0 9	1	3	1.1	4	1 1	0	4	2.1	3	1 54	27.0	4	3.0	4.2	2 46	9	4
34	5	8	28 42	2	22.2	4	9	29 33	2	23.2	3	8	0 24	25.1	24.3	3	7	1 16	0	25.3	2	6	2 7	0	3	2	5	2 59	9	3
35	7	0.4	28 57	3	2	6	1.2	29 48	2	2	5	2.1	0 39	1	2	5	3.0	1 30	1	2	4	9	2 21	0	26.2	4	8	3 13	9	27.2
36	9	7	29 13	3	1	8	6	0 3	2	1	7	5	0 54	2	1	7	4	1 44	26.1	1	6	4.2	2 36	0	1	6	5.1	3 26	28.0	2
37	29.1	1.0	29 29	23.4	0	25	9	0 19	3	0	1.0	8	1 9	2	0	9	7	1 59	1	0	9	6	2 50	0	0	8	4	3 40	0	1
38	3	4	29 45	4	21.9	0.2	2.2	0 34	24.3	22.9	2	3.1	1 24	2	23.9	2.1	4.0	2 14	1 24.9	3.1	9	3 4	27.1	0	4.0	7	3 54	0	0	
39	5	7	0 1	5	8	5	5	0 50	4	8	4	5	1 39	25.3	8	4	4	4 229	2	8	3	5.2	3 18	1	25.9	3	6.0	4 8	0	26.9
40	8	2.1	0 17	5	8	7	9	1 6	4	8	6	8	1 55	3	8	6	7	2 44	26.2	7	5	6	3 33	1	8	5	4	4 22	0	8
41	5	0 34	23.6	7	1.0	3.2	1 22	5	7	9	4.2	2 11	3	7	8	5.1	2 59	2	6	8	9	3 48	1	7	7	8	4 37	28.0	7	
42	0.3	9	0 51	6	6	2	6	1 38	5	22.6	2.2	6	2 26	4	23.6	3.1	5	3 15	3 24.5	4.1	6.3	4 3	2	6	5.0	7.1	4 51	1	6	
43	5	3.3	1 8	7	21.5	5	4.0	1 55	24.6	5	4	5.0	2 43	25.4	5	4	8	3 30	3	4	3	7	4 18	27.2	4	3	5	5 6	1	5
44	8	7	1 25	7	5	8	4	2 12	6	4	7	4	2 59	5	4	7	6.2	3 46	26.3	4	6	7.0	4 34	2	25.3	6	9	5 21	1	26.4
45	1.1	4.1	1 43	23.8	4	2.1	8	2 29	6	3	3.0	7	3 16	5	4	9	5 4 2	4	3	9	4 4 49	2	3	8	8.3	5 36	1	3		
46	4	4	2 0	8	3	4	5.2	2 46	7	22.3	3	6.1	3 33	5	23.3	4.2	9	4 19	4 24.2	5.2	8	5 5	3	2	6.1	7	5 52	28.1	2	
47	7	8	2 18	9	21.2	7	7	3 4	7	2	6	5	3 50	25.6	1	6	7.3	4 35	4	1	5	8.2	5 21	3	1	4	9.1	6 7	2	1
48	2.1	5.3	2 37	9	1	3.0	6.1	3 22	24.8	1	9	9	4 7	6	0	9	7	4 52	26.5	0	8	6	5 38	27.3	0	8	5	6 23	2	0
49	4	7	2 56	24.0	1	3	6	3 40	8	0	4.3	7.3	4 25	7	22.9	5.2	8.1	5 10	5 23.9	6.1	9.0	5 55	3 24.8	7.1	9	6 39	2 25.9			
50	8	6.2	3 15	1	0	7	7.0	3 59	9	21.9	7	8	4 43	7	8	6	6	5 27	6	8	5	4 6 12	4	7	5	10.3	6 56	2	7	
51	3.1	7	3 34	1 20.9	4.0	5	4 18	9	8	5.0	8.3	5 1	25.8	7	9	9.1	5 45	6	7	8	9	6 29	4	6	8	7	7 13	28.2	6	
52	5	7.2	3 54	2	8	4	8.0	4 37	25.0	7	4	8	5 20	8	6	6.3	6	6	3 26.6	6	7.2	10.4	6 47	27.4	5	8.1	11.1	7 30	3	5
53	9	7	4 15	24.2	7	8	5	4 57	0	6	8	9.3	5 39	8	22.5	7	10.1	6 22	7 23.4	6	9	7 5	5 24.3	5	6	7 48	3 25.4			
54	4.4	8.2	4 35	3	6	5.3	9.0	5 17	1	5	6.2	8	5 59	9	4	7.2	6	6 41	7	3	8.1	11.4	7 23	5	2	9.0	12.1	8 5	3	2
55	9	7	4 57	4	4	8	5	5 38	2	3	7	10.3	6 19	26.0	2	7	11.1	7 0	8	1	6	9	7 42	6	0	5	6	8 24	4	0
56	5.4	9.3	5 18	4	3	6.3	10.1	5 59	2	2	7.2	9	6 40	0	1	8.2	6	7 20	8	0	9.1	12.4	8 1	6 23.9	10.0	13.1	8 42	4 24.9		

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.					
SID. T. 3 55 26					3 59 37					4 3 48					4 8 1					4 12 13					
ARC 58° 51' 5					59° 54' 2					60° 57' 1					62° 0' 1					63° 3' 3					
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3
Lat.	25°	Q	吸	吸	吸	25°	Q	吸	吸	吸	25°	Q	吸	吸	吸	25°	Q	吸	吸	吸	25°	Q	吸	吸	吸
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	
22°	2.0	2.1	1 20	28.8	29.4	3.0	3.1	2 17	29.8	0.4	3.9	4.1	3 14	0.8	1.5	4.9	5.0	4 11	1.8	2.5	5.9	6 0	5 9	2.9	3.6
23	2	4	1 33	8	3	2	3	2 29	8	3	4.1	3	3 26	8	4	5.1	3	4 23	8	4	6.0	3 5	2 0	9 5	7.0
24	4	7	1 45	8	2	3	6	2 41	8	3	3	6	3 37	8	3	2	5	4 34	8	3	2	5	5 31	9	4
25	5	9	1 57	8	1	5	9	2 53	8	2	4	8	3 49	8	2	4	8	4 45	8	3	4	8	5 42	8	3
26	7	3.2	2 10	8	1	6	4.1	3 5	8	1	6	5.1	4 1	8	1.1	6	6.0	4 57	8	2.2	5	7.0	5 53	8	3.2
27	9	5	2 22	28.8	0	8	4	3 17	29.8	0	8	3	4 13	0.8	1	7	3	5 8	1.8	1	7	3 6	4 28	1	7
28	3.0	7	2 35	8	28.9	4.0	6	3 30	8 29.9	9	9	6	4 24	8	0	9	5	5 19	8	0	9	5	6 15	8	0
29	2	4.0	2 47	8	8	2	9	3 42	8	8	5.1	8	4 36	8	0.9	6.1	8	5 31	8	1.9	7.0	8 6	26	8 29	8.0
30	4	3 3 0	8	7	3	5.2	3 54	8	8	3	6.1	4 48	8	8	3	7.0	5 42	8	8	2	8.0	6 37	7	8	
31	6	5 3 13	8	6	5	5	4 6	8	7	5	4 5 0	8	7	4	3	5 54	8	7	4	3 6 48	7	7	4	2 7 42	
32	8	8	3 26	28.8	28.5	7	7	4 19	29.8	29.6	7	7	5 12	0.8	6	6	6	6 5	1.8	6	6	6 6 59	2.7	6	5
33	4.0	5.1	3 38	9	5	9	6.0	4 31	8	5	9	9	5 24	8	5	8	9 6 17	7	5	8	8 7 10	7	5	7	
34	1	4	3 51	9	4	5.1	3	4 44	8	4	6.0	7.2	5 36	8	0.4	7.0	8.1	6 29	7	1.4	8.0	9.1	7 22	7	2.4
35	3	7	4 4	9	3	3	6	4 56	8	3	2	5	5 48	8	3	2	4	6 41	7	3	2	4 7 33	7	3	9.1
36	5	6.0	4 18	9	28.2	5	9	5 9	8 29.2	4	8	6 1	8	2	4	7	6 53	7	2	4	7 7 44	7	2	3	
37	8	3	4 31	28.9	1	7	7.2	5 22	29.8	1	7	8.1	6 13	0.8	1	6	9.0	7 5	1.7	1	6 10.0	7 56	2.7	1	
38	5.0	6	4 44	9	0	9	5	5 35	8	0	9	4	6 26	8	0	8	3 7 17	7	0	8	3 8 8	6	0	7 11.2	
39	2	9	4 58	9 27.9	6.2	8	5 48	8 28.9	7.1	7	6 38	8 29.9	8.1	7	7 29	7	0.9	9.0	6 8 19	6	1.9	10.0	5 9 10	5 2.9	
40	4	7.3	5 12	9	8	4	8.2	6 2	8	8	3	9.1	6 51	8	8	3	10.0	7 41	7	8	2	9 8 31	6	8	2 8 9 22
41	7	6	5 26	9	7	6	5	6 15	29.8	7	6	4	7 4	8	7	5	3 7 54	7	6	5 11.3	8 44	6	6	4 12.2	
42	6.0	8.0	5 40	29.0	5	9	9	6 29	8	5	9	8	7 18	0.8	5	8	7 8 7	1.7	5	8	6 8 56	2.6	5	7 5 9 45	
43	2	4	5 54	0	4	7.2	9.2	6 43	9	4	8.1	10.1	7 31	8	4	9.1	11.0	8 20	7	0.4	10.0	12.0	9 8	6	14 11.0
44	5	7	6 9	0 27.3	5	6	6 57	9 28.3	4	5	7 44	8 29.3	3	4	8 33	7	3	3 3 9 21	6	2	2 13 1 10	9	4	2	
45	8	9.1	6 23	0	2	7	10.0	7 11	29.9	2	7	8	7 58	8	2	6	7 8 46	6	1	6	6 9 34	6	1	5 4 10 21	
46	7.1	5	6 38	0	1	8.0	4	7 25	9	1	9.0	11.2	8 12	8	1	9 12.1	8 59	6	0	9	9 9 47	5	0	8 8 10 34	
47	4	8	6 53	29.0	0	3	7	7 40	9	0	3	5	8 26	0.8	0	10.2	5 9 13	1.6 29.9	11.2	13.3	10 0	2.5	0.9	12.1	14.2
48	7	10.2	7 9	0 26.9	6	11.1	7 55	9 27.9	6	9	8 41	8 28.8	5	8 9 27	6	8	5 6 10 13	5	7	4	5 10 59	3	7	2 0 0	
49	8.0	6	7 25	1	7	9.0	5	8 10	29.9	8	10.0	12.3	8 55	8	7	8 13.2	9 41	6	6	8 14.0	10 27	5	6	7 8 11 12	
50	4	11.1	7 41	1	6	3	9	8 25	9	6	3	7	9 10	8	5	11.2	6 9 55	6	5 12.1	4 10 41	5	4	13.1	15.2	11.26
51	7	5	7 57	1	5	6 12.3	8 41	9	5	6 13.1	9 25	8	4	5 14.0	10 10	6 29.3	4	8 10 55	5 0 3	4	6 11 39	3	3		
52	9.1	9	8 13	29.1	26.4	10.0	7	8 57	9 27.3	11.0	5	9 41	0.8	2	9	4 10 25	1.6	2	8 15 2 11	9 24	1	8 16	11 53	3.2	
53	5	12.4	8 30	1	2	4 13.2	9 13	△	2	4 14.0	9 57	8	1	12.3	8 10 40	6	0 13.2	6 11 24	4	0 14.2	4 12	7	2 0 0		
54	9	9	8 48	1	1	9	7	9 30	0.0	0	8	5 10 13	8 27.9	7 15.3	10 56	6 28.9	6 16.1	11 39	4 29.8	6	9 12 22	2	7		
55	10.4	13.4	9 5	2 25.9	11.3	14.2	9 47	0 26.8	12.2	15.0	10 29	8	7	13.2	8 11 11	6	7	14.1	6 11 54	4	6 15 0	17 4 12 36	2	5	
56	9	9	9 23	2	8	9	7 10	5	0	7	7	5 10 46	8	6	7 16.3	11 28	5	5	6 17 1	12 10	3	4	3 9 12 51	1	3

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

Lat.	H. M. S. SID. T. 4 16 27 ARC 64° 6'.7					H. M. S. 4 20 41 65° 10'.2					H. M. S. 4 24 55 66° 13'.8					H. M. S. 4 29 11 67° 17'.6					H. M. S. 4 33 26 68° 21'.6					H. M. S. 4 37 42 69° 25'.6											
	II 6°					II 7°					II 8°					II 9°					II 10°					II 11°											
	H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3						
22°	6.8	7.0	6	7	3.9	4.6	7.8	7.9	7	5	5.0	5.6	8.8	8.9	8	3	6.0	6.7	9.8	9.9	9	2	7.0	7.7	10.7	10.9	10	0	8.1	8.8	11.7	11.8	10	59	9.2	9.8	
23	7.0	2	6	17	9	5	8.0	8.2	7	15	4.9	5	9	9.2	8	13	0	6	9	10.1	9	11	0	6	9	11.1	10	9	1	7	9	12.1	11	8	1	7	
24	2	5	6	28	9	4	1	4	7	25	9	5	9.1	4	8	22	5.9	5	10.1	4	9	20	0	5	11.0	3	10	18	0	6	12.0	3	11	16	1	6	
25	3	7	6	38	9	3	3	7	7	35	9	4	3	6	8	32	9	4	2	6	9	29	6.9	4	2	6	10	27	0	5	2	5	11	24	0	5	
26	5	8.0	6	49	8	4.2	4	9	7	45	8	5.3	4	9	8	42	9	6.3	4	8	9	39	9	7.3	4	8	10	36	7.9	4	3	7	11	33	8.9	4	
27	7	2	6	59	3.8	1	6	9.2	7	55	8	2	6	10.1	8	52	8	2	5	11.1	9	48	8	2	5	12.0	10	44	9	8.3	5	13.0	11	41	9	9.3	
28	8	5	7	10	8	1	8	4	8	6	4.8	1	8	4	9	1	8	1	7	3	9	57	8	1	7	3	10	53	8	2	7	2	11	50	8	2	
29	8.0	7	7	21	8	0	9.0	7	8	16	8	0	9	6	9	11	5.8	0	9	5	10	7	8	0	9	5	11	2	8	1	8	4	11	58	8	1	
30	2	9.0	7	31	7	3.9	1	9	8	26	7	4.9	10.1	8	9	21	7	5.9	11.1	8	10	16	6.7	6.9	12.0	7	11	11	7	0	13.0	7	12	7	7	0	
31	4	2	7	42	7	8	3	10.2	8	36	7	8	3	11.1	9	31	7	8	2	12.0	10	25	7	8	2	13.0	11	20	7.7	7.9	2	9	12	15	8.7	8.9	
32	5	5	7	53	3.7	7	5	4	8	47	7	7	5	3	9	41	7	7	4	3	10	35	6	7	4	2	11	29	6	7	3	14.2	12	24	6	8	
33	7	8	8	4	7	6	7	7	8	57	4.6	6	6	6	6	9	51	6	6	6	5	10	44	6	6	6	5	11	38	6	6	5	4	12	33	6	6
34	9.10.0	8	14	6	5	9	11.0	9	8	6	5	8	9	10	1	5.6	5	8	8	10	54	6	5	8	8	11	48	5	5	7	7	12	41	5	5		
35	9.1	3	8	25	6	3.4	10.1	2	9	18	6	4.4	11.0	12.2	10	11	6	5.4	12.0	13.1	11	4	6.5	6.4	13.0	14.0	11	57	5	7.4	9	9	12	50	5	8.4	
36	3	6	8	37	6	2	3	5	9	29	6	2	2	4	10	21	5	3	2	3	11	13	5	3	2	3	12	6	7.4	3	14.1	15.2	12	59	8.4	3	
37	5	9	8	48	3.6	1	5	8	9	40	6	1	4	7	10	31	5	1	4	5	11	23	4	1	4	5	12	16	4	1	3	5	13	8	3	1	
38	7	11.2	8	59	6	0	7	12.1	9	50	4.6	0	7	13.0	10	42	4	0	6	8	11	33	4	0	6	7	12	25	3	0	5	7	13	17	3	0	
39	10.0	5	9	10	5	2.9	9	4	10	1	5	3.9	9	3	10	52	5.4	4.9	8	14.1	11	43	3	5.9	8	15.0	12	35	3	6.9	8	9	13	26	2	7.9	
40	2	8	9	22	5	8	11.1	7	10	12	5	8	12.1	6	11	3	4	7	13.1	4	11	53	6.3	7	14.0	3	12	44	7.3	7	15.0	16.2	13	35	8.2	7	
41	4	12.2	9	33	5	6	4	13.1	10	23	5	6	4	14.0	11	13	3	6	3	8	12	4	3	6	3	6	12	54	2	6	2	5	13	44	1	6	
42	7	5	9	45	3.5	5	7	4	10	35	5	5	6	3	11	24	3	5	6	15.1	12	14	2	5	5	16.0	13	4	2	4	5	8	13	54	1	4	
43	11.0	8	9	57	4	2.4	9	7	10	46	4.5	3.3	9	6	11	35	5.3	4.3	8	4	12	24	2	5.3	8	3	13	14	2	6.3	7	17.1	14	3	0	3	
44	2	13.1	10	9	4	2	12.2	14.0	10	58	4	2	13.1	9	11	46	2	2	14.1	7	12	35	1	2	15.0	6	13	24	7.1	1	16.0	5	14	13	7.9	1	
45	5	4	10	21	4	1	5	3	11	10	4	0	4	15.2	11	58	2	0	4	16.1	12	46	6.1	0	3	9	13	34	1	0	3	8	14	23	9	6.9	
46	8	8	10	34	4	0	8	7	11	22	4	2.9	7	5	12	9	1	3.9	6	4	12	57	0	4.9	6	17.3	13	45	0	5.8	6	18.1	14	33	8	8	
47	12.1	14.2	10	46	3.3	1.9	13.0	15.0	11	34	3	8	14.0	9	12	21	5.1	7	9	7	13	8	0	8	9	6	13	55	0	7	8	4	14	43	8	6	
48	4	5	10	59	3	7	3	3	11	46	4.3	7	3	16.2	12	32	1	5	15.2	17.0	13	19	0	6	16.2	9	14	6	6.9	6	17.1	7	14	53	7.7	4	
49	7	8	11	12	3	5	7	7	11	58	3	5	6	5	12	44	0	4	5	4	13	31	5.9	4	5	18.2	14	17	9	4	4	19.1	15	3	7	6.2	
50	13.1	15.2	11	26	3	4	14.0	16.1	12	11	2	2.3	9	9	12	57	0	2	9	8	13	42	9	2	8	6	14	28	8	2	7	4	15	14	6	1	
51	4	6	11	39	3	3	5	12	24	2	2	15.2	17.3	13	9	4.9	0	16.2	18.2	13	54	9	1	17.1	19.0	14	39	7	1	18.1	8	15	25	6	0		
52	8	16.0	11	53	3.2	1	7	9	12	37	4.1	1	6	7	13	22	9	2.8	5	6	14	6	8	3.9	5	4	14	51	6.7	4.9	4	20.2	15	36	7.5	5.8	
53	14.2	4	12	7	2	0.9	15.1	17.3	12	51	1	1.9	9	18.1	13	35	8	6	9	19.0	14	19	5.7	7	9	8	15	3	6	7	7	6	15	47	4	6	
54	6	9	12	22	2	7	5	7	13	5	0	7	16.3	5	13	48	8	4	17.3	4	14	31	7	5	18.3	20.2	15	15	6	5	19.1	21.0	15	58	4	4	
55	15.0	17.4	12	36	2	5	9	18.2	13	19	0	5	8	19.0	14	1	7	1	7	8	14	44	6	3	7	6	15	27	5	3	6	4	16	10	3	2	
56	5	9	12	51	1	3	16.4	7	13	33	3.9	3	17.3	4	14	15	6	1.9	18.2	20.2	14	57	5	1	19.1	21.0	15	40	4	1	20.1	8	16	22	3	0	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.						
SID. T. 4 41 59					4 46 16					4 50 34					4 54 52					4 59 11						
ARC 70° 29'.8					12°					71° 34'.1					72° 38'.5					73° 43'.1						
II.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	
Lat.	��	卯	辰	巳	午	��	卯	辰	巳	午	��	卯	辰	巳	午	時	卯	辰	巳	午	時	卯	辰	巳	午	
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
22	12.7	12.8	11 58	10.2	10.9	13.7	13.8	12 57	11.3	11.9	14.6	14.8	13 57	12.4	12.9	15.6	15.8	14 56	13.4	13.9	16.6	16.8	15 56	14.5	15.0	
23	8	13.0	12 6	2	8	8	14.0	13 5	2	8	8	15.0	14 4	4	3	8	8	16.0	15 3	4	8	8	17.0	16 2	4	14.9
24	13.0	3	12 14	1	7	14.0	2	13 12	1	7	9	2	14 11	2	7	9	2	15 9	3	7	9	2	16 8	3	8	9
25	1	5	12 22	0	6	1	5	13 20	1	6	15.1	4	14 18	1	6	16.1	4	15 16	2	6	17.1	4	16 14	2	7	18.0
26	3	7	12 30	0	5	3	7	13 27	0	5	3	7	14 25	1	5	2	6	15 23	1	5	2	6	16 21	14.1	5	2
27	5	9	12 38	9.9	10.3	4	9	13 35	10.9	11.4	4	9	14 32	0	12.4	4	8	15 29	0	13.4	4	8	16 27	1	4	4
28	6	14.2	12 46	8	2	14.6	15.1	13 43	9	2	6	16.1	14 39	11.9	3	6	17.1	15 36	12.9	3	5	18.0	16 33	0	14.3	5
29	8	4	12 54	8	1	8	4	13 50	8	1	7	3	14 46	8	2	7	3	15 43	9	2	7	2	16 39	13.9	2	7
30	14.0	6	13 2	7	0	9	6	13 58	7	0	9	5	14 54	8	0	9	5	15 50	8	1	9	5	16 46	8	1	8
31	1	9	13 10	9.7	9.9	15.1	8	14 6	7	10.9	16.1	8	15 1	7	11.9	17.1	7	15 56	7	12.9	18.0	7	16 52	7	0	19.0
32	3	15.1	13 18	6	8	3	16.1	14 13	10.6	8	2	17.0	15 8	6	8	2	18.0	16 3	6	8	2	9 16 59	6	13.8	2	
33	5	4	13 27	5	7	5	3	14 21	5	7	4	2	15 16	11.5	7	4	2	16 10	12.5	7	4	19.1	17 5	13.5	7	4
34	7	6	13 35	5	5	6	5	14 29	5	5	6	5	15 23	5	6	6	4	16 17	5	6	6	4	17 11	5	6	5
35	9	9	13 43	9.4	9.4	8	8	14 37	4	10.4	8	7	15 30	4	11.4	8	7	16 24	4	12.4	8	6	17 18	4	4	7
36	15.1	16.1	13 52	4	3	16.0	17.1	14 45	4	3	17.0	9	15 38	3	3 18.0	9	16 31	3	3	9	8	17 25	3	13.3	9	
37	3	4	14 0	3	1	2	3	14 53	10.3	1	2	18.1	15 45	11.2	1	2	19.1	16 38	12.2	2	19.1	20 0	17 31	13.3	2	20.1
38	5	6	14 9	2	0	5	5	15 1	2	0	4	4	15 53	2	0	4	3	16 45	1	0	4	3	17 38	2	0	3
39	7	9	14 17	9.2	8.9	7	8	15 9	1	9.9	6	7	16 1	1	10.9	6	6	16 53	1	11.9	6	5	17 45	1	12.9	6
40	9	17.1	14 26	1	7	9	18.1	15 17	1	7	9	19.0	16 9	0	7	8	9	17 0	0	7	8	8	17 52	0	7	8
41	16.2	4	14 35	1	6	17.1	3	15 26	0	6	18.1	2	16 17	10.9	6	19.1	20 2	17 7	11.9	5	20.0	21.1	17 58	12.9	5	21.0
42	4	7	14 44	0	4	4	6	15 34	9.9	4	4	5	16 25	9	4	3	4	17 15	8	4	3	3	18 5	9	4	2
43	7	18.0	14 53	8.9	3	7	9	15 43	9	3	6	8	16 33	8	2	6	7	17 23	7	2	5	6	18 13	8	2	5
44	17.0	4	15 2	8	1	9	19.2	15 51	8	1	9	20.1	16 41	7	1	8	21.0	17 30	6	0	8	9 18 20	7	0	8	
45	2	7	15 11	8	7.9	18.2	5	16 0	7	8.9	19.1	4	16 49	10.6	9.9	20.1	3	17 38	11.5	10 9	21.1	22 2	18 27	6	11.9	
46	5	19.0	15 21	7	8	5	9	16 9	6	8	4	7	16 58	5	8	4	6	17 46	4	8	3	4	18 34	12.5	8	3
47	8	3	15 30	7	7	7	20.2	16 18	9.6	6	6	21.0	17 6	4	6	6	9	17 54	4	6	5	7	18 42	3	6	5
48	18.0	6	15 40	8.6	5	19.0	5	16 27	5	5	9	3	17 15	3	4	9	22.2	18 2	3	4	8	23 0	18 50	2	4	7
49	3	9	15 50	6	3	3	8	16 37	5	3	20.2	6	17 24	10.2	2	21 2	5	18 10	11.2	2	22.1	3	18 57	1	2	23 0
50	6	20.3	16 0	5	1	6	21.1	16 46	4	1	5	22.0	17 32	2	0	5	8	18 19	1	0	4	7	19 5	0	10.9	3
51	9	6	16 10	4	6.9	9	5	16 56	9.3	7.9	8	3	17 41	1	8.8	8	23 2	18 27	0	9.8	7	24.0	19 13	11.9	7	6
52	19.3	21.0	16 21	8.3	7	20.2	8	17 6	2	7	21.1	6	17 51	0	6	22.1	5	18 36	10.9	6	23.0	3	19 21	8	8	9 25 2
53	7	4	16 31	3	5	6	22.2	17 16	1	5	5	23.0	18 0	9.9	4	4	8	18 45	8	4	4	6	19 29	6	3	24 3
54	20.1	8	16 42	2	3	21.0	6	17 26	0	3	9	4	18 10	8	2	8	24.2	18 53	7	2	8	25 19 38	8	1	7	
55	5	22.2	16 53	1	1	4	23 0	17 36	8.9	0	22.3	8	18 20	7	0	23.2	6	19 3	6	8.9	4	4	19 49	4	9.8	1
56	21.0	6	17 4	0	5.9	9	4	17 47	8	6.8	8	24.2	18 30	6	7.8	7	25 0	19 12	5	7	6	8	19 33	7	8	6

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.																					
SID. T. 5 3 30 } II			5 7 49 } II 18°			5 12 9 } II 19°			5 16 29 } II 20°			5 20 49 } II 21°			5 25 10 } II 22°																					
ARC 75° 52' 5") 17°			76° 57' 3")			78° 2' 2")			79° 7' 2")			80° 12' 3")			81° 17' 4")																					
11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3																	
Lat.	��	分	秒	時	分	秒	時	分	秒	��	分	秒	時	分	秒	時	分	秒																		
22	17.6	17.8	16.55	15.6	16.0	18.6	18.8	17.55	16.6	17.1	19.6	19.8	18.55	17.7	18.1	20.6	20.8	19.55	18.7	19.1																
23	7.1	8.0	17.1	1	5.15.9	7.1	9.0	18.1	1	5.0	7.2	0.0	19.0	19.0	19.0	6.0	0	7.2	0.0	20.59	6.0	0														
24	9	2	17	7	4	8	9	2	18	6	4	16.8	9	2	19	5	5	17.9	9	1	20	4	5	18.9												
25	18.0	4	17	13	3	7	19.0	4	18	11	3	7	20.0	4	19	10	4	7	21.0	3	20	9	4	8	22.0											
26	2	6	17	19	15.2	6	2	6	18	17	16.2	6	2	6	19	15	17.3	6	2	5	20	13	18.3	6	2	5	21	12	19.3							
27	4	8	17	24	1	5	3	8	18	22	1	5	3	8	19	20	1	5	3	7	20	18	2	5	3	7	21	16	2	6						
28	5	19.0	17	30	0	15.3	5	20.0	18	27	0	16.4	5	21.0	19	25	0	17.4	5	9	20	22	1	18.4	5	9	21	20	1	19.4						
29	7	2	17	36	14.9	2	7	2	18	33	15.9	2	7	2	19	30	16.9	3	6	22.1	20	27	0	3	6	23.1	21	24	0	3						
30	8	4	17	42	8	1	8	4	18	38	8	1	8	4	19	35	8	1	8	3	20	31	17.8	1	8	3	21	28	18.9	2	8	3	22	25	19.9	
31	19.0	6	17	48	7	0	20.0	6	18	44	7	0	21.0	6	19	40	7	0	22.0	5	20	36	7	0	23.0	5	21	32	7	0	9	5	22	28	7	0
32	2	9	17	54	6	14.8	2	8	18	49	6	15.9	2	8	19	45	6	16.9	1	8	20	41	6	17.9	1	7	21	36	6	18.9	24.1	7	22	32	6	19.9
33	4	20.1	18	0	14.5	7	3	21.0	18	55	15.5	7	3	22.0	19	50	5	7	3	23.0	20	45	5	7	3	9	21	40	5	8	3	9	22	36	5	8
34	5	3	18	6	4	6	5	3	19	0	4	6	5	3	21	55	16.4	6	5	3	22	50	4	6	5	24.1	21	45	18.4	6	5	25.1	22	39	19.4	6
35	7	5	18	12	3	4	7	5	19	6	3	4	7	4	20	0	3	4	7	4	20	55	17.3	4	7	3	21	49	3	5	6	3	22	43	3	5
36	9	7	18	18	3	14.3	9	7	19	12	3	15.3	9	6	20	5	2	16.3	9	5	20	59	2	17.3	8	5	21	53	2	18.3	8	5	22	47	1	19.3
37	20.1	9	18	24	14.2	1	21.1	9	19	17	15.2	1	22.1	8	20	11	1	1	23.1	7	21	4	1	1	24.0	7	21	57	0	1	25.0	7	22	51	0	1
38	3	21.2	18	30	1	0	3	22.1	19	23	1	0	3	23.0	20	16	0	0	3	24.0	21	9	0	0	2	9	22	2	17.9	0	2	9	22	55	18.9	0
39	6	4	18	37	0	13.9	5	4	19	29	0	14.8	5	3	20	21	15.9	15.8	5	2	21	14	16.9	16.8	4	25.1	22	6	8	17.8	4	26.1	22	59	8	18.8
40	8	7	18	43	13.9	7	7	6	19	35	14.9	7	7	5	20	27	8	7	7	5	21	19	8	7	6	4	22	10	7	7	6	3	23	2	7	6
41	21.0	22.0	18	50	8	5	22.0	9	19	41	8	5	9	8	20	32	7	5	9	7	21	23	7	5	9	6	22	15	6	5	8	5	23	6	6	5
42	2	2	18	56	7	4	22.3	1	19	47	7	3	23.2	24.0	20	38	6	3	24.1	25.0	21	28	6	3	25.1	9	22	19	17.4	3	26.1	8	23	10	18.5	3
43	5	5	19	3	6	2	5	4	19	53	6	2	4	3	20	43	4	1	4	2	21	34	16.5	1	3	26.1	22	24	3	1	3	27.0	23	14	3	1
44	8	8	19	9	5	0	7	7	19	59	14.5	0	7	6	20	49	15.3	0	6	5	21	39	3	15.9	6	4	22	29	2	16.9	6	3	23	19	2	17.9
45	22.0	23.1	19	16	13.4	12.9	23.0	24.0	20	5	4	13.9	9	9	20	55	2	14.9	9	7	21	44	2	8	9	6	22	33	0	8	8	5	23	23	0	8
46	3	3	19	23	3	7	2	2	20	12	2	7	24.1	25.1	21	0	1	7	25.1	26.0	21	49	1	6	26.1	9	22	38	16.9	6	27.0	7	23	27	17.8	6
47	5	6	19	30	2	5	4	4	20	18	0	5	3	3	21	6	0	5	3	22	15	15.9	4	3	27.2	22	43	7	4	2	28.0	23	31	6	4	
48	7	9	19	37	1	3	7	7	20	25	13.9	3	6	6	21	12	14.9	2	6	5	22	0	8	2	5	5	22	48	6	2	4	2	23	35	5	1
49	23.0	24.2	19	44	0	1	24.0	25.1	20	31	8	1	9	9	21	18	8	0	9	8	22	5	7	0	8	7	22	53	4	0	7	5	23	40	3	16.9
50	3	5	19	51	12.9	11.9	3	4	20	38	7	12.9	25.2	26.2	21	24	6	13.8	26.2	27.1	22	11	5	14.8	27.1	28.0	22	58	16.3	15.8	28.0	8	23	44	2	7
51	6	9	19	59	8	7	6	7	20	45	5	7	5	5	21	31	5	6	5	4	22	17	15.4	6	4	3	23	3	2	6	3	29.1	23	49	0	5
52	9	25.2	20	6	6	5	9	26.0	20	52	13.4	5	8	8	21	37	14.3	4	8	7	22	23	2	4	7	6	23	8	1	4	6	4	23	54	16.9	3
53	24.3	5	20	14	5	3	25.2	3	20	59	3	3	26.1	27.1	21	44	2	2	27.1	28.0	22	29	0	2	28.0	9	23	13	15.9	1	9	7	23	58	8	1
54	7	8	20	22	12.3	1	6	7	21	6	2	0	5	5	21	50	0	12.9	5	3	22	35	14.9	13.9	4	29.2	23	19	7	14.8	29.3	24	3	6	15.8	
55	25.1	26.2	20	30	2	10.8	26.0	27.1	21	13	0	11.7	9	9	21	57	13.9	6	9	7	22	41	7	6	8	5	23	24	5	5	7	0.3	24	8	4	5
56	5	6	20	38	1	5	4	5	21	21	12.9	4	27.3	28.3	22	4	7	3	28.3	29.1	22	47	5	3	29.2	9	23	30	3	2	0.1	7	24	13	2	2

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																														
SID. T.	5 29 30	5 33 51	5 38 12	5 42 34	5 46 55	5 51 17																																		
ARC	82° 22'.6	83° 27'.8	84° 33'.1	85° 38'.5	86° 43'.8	87° 48'.2																																		
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3															
Lat.	25	26	27	28	29	25	26	27	28	29	25	26	27	28	29	25	26	27	28	29	25	26	27	28	29															
22	23.6	23.8	22.56	21.8	22.2	24.6	24.8	23.56	22.8	23.2	25.6	25.8	24.57	23.8	24.3	26.6	26.8	25.57	24.8	25.3	27.6	27.8	26.58	25.9	26.3	28.6	25.9	27.55	26.9	27.3										
23	7	7	24.0	22.59	7	1	7	25.0	23.59	6	1	7	26.0	24.59	8	1	7	27.0	25.59	7	2	7	28.0	26.59	8	2	7	29.0	27.59	8	2									
24	9	9	123	2	6	0	8	24.2	2	5	0	9	125	1	6	0	9	226	1	6	0	9	227	1	6	0	9	228	0	6	1									
25	24.0	3	23	5	5	21.8	25.0	3	24	4	4	22.9	26.0	3	25	3	5	23.9	27.0	3	26	3	5	24.9	28.0	3	27	2	5	25.9	29.0	4	28	1	5	26.9				
26	2	5	23	9	21.4	7	1	5	24	7	22.3	7	2	5	25	6	23.3	8	2	5	26	4	24.3	8	2	5	27	3	25.4	8	2	5	28	226	8					
27	3	7	23	12	2	6	3	7	24	10	2	6	3	7	25	8	2	6	3	7	26	6	2	6	3	7	27	5	2	6	3	7	28	3	2	7				
28	5	5	9	23	15	1	5	4	9	24	13	0	5	5	9	25	10	1	5	5	9	26	8	1	5	5	8	27	6	1	5	5	8	28	4	1	5			
29	24.6	25.1	23	18	0	21.3	25.6	26.1	24	15	21.9	22.3	26.6	27.0	25	13	22.9	23.3	27.6	28.0	26	10	23.9	24.4	28.6	29.0	27	7	24.9	25.4	29.6	28	5	25.9	26.4					
30	8	8	23	21	20.9	2	8	24	18	8	2	8	225	15	8	2	8	226	12	8	2	8	227	9	8	2	8	0	228	6	8	2								
31	9	9	423	25	8	0	9	4	24	21	7	1	9	4	25	17	7	1	9	4	26	14	7	1	9	3	27	10	7	1	9	328	7	7	1					
32	25.1	6	23	28	6	20.9	26.1	6	24	24	6	21.9	27.1	6	25	20	5	22.9	28.1	6	26	16	5	23.9	29.1	5	27	12	5	24	9	0	1	5	28	8	5	25	9	
33	3	8	23	31	5	8	3	8	24	27	21.4	8	3	8	25	22	22.4	8	3	7	26	17	23.4	8	2	7	27	13	24.4	8	2	7	28	9	25	4	8			
34	4	4	26.0	23	34	20.4	6	4	27.0	24	29	3	6	4	28.0	25	24	3	6	4	9	26	19	2	6	4	9	27	14	3	6	4	8	28	10	2	6			
35	6	6	223	38	3	5	6	2	24	32	2	5	6	125	27	1	5	6	29.1	26	21	1	5	6	0	127	16	1	5	6	1	0	28	11	1	4				
36	8	8	423	41	1	20.3	8	4	24	35	0	21.3	8	3	25	29	0	22.3	8	3	26	23	0	23.3	8	3	27	17	0	3	8	226	11	24.9	3					
37	26.0	7	23	44	0	1	27.0	6	24	38	20.9	1	28.0	5	25	31	21.9	1	0	5	26	25	22.8	1	9	4	27	19	23.9	1	9	4	28	12	7	1				
38	2	2	9	23	48	19.9	0	2	8	24	41	8	0	2	7	25	34	7	0	29.2	7	26	27	7	0	0.1	6	27	20	8	23.9	11	5	28	13	6	24	9		
39	4	4	27.1	23	51	7	19.8	4	28.0	24	44	7	20.8	4	9	25	36	6	21.8	3	9	26	29	5	22.8	3	8	27	22	6	8	3	7	28	14	4	7			
40	6	6	323	54	6	6	6	2	24	47	6	6	6	29.1	25	39	4	6	5	0.1	26	31	4	6	5	1.0	27	23	4	6	5	9	28	15	2	6				
41	8	8	523	58	5	4	8	5	24	50	20.5	4	8	3	25	41	21.3	4	8	3	26	33	2	4	7	227	25	3	4	7	21	28	16	1	4					
42	27.1	7	24	1	19.3	3	28.0	7	24	53	3	2	29.0	5	25	44	1	2	2	2	5	26	35	0	2	9	4	27	26	1	2	9	328	17	23.9	2				
43	3	3	9	24	5	2	1	2	9	24	56	2	0	2	7	25	46	0	0	0.2	8	26	37	21.9	0	1.2	7	27	28	22.9	0	2	21	5	28	18	7	0		
44	5	5	28.2	24	9	0	18.9	4	29.2	24	59	0	19.8	5	9	25	49	20.8	20.9	4	1.0	26	39	7	21.8	4	9	27	29	8	22.8	3	7	28	19	6	23	8		
45	8	8	4	24	12	18.9	7	6	4	25	2	19.8	6	7	0.1	25	51	6	7	6	2	26	41	5	6	6	2	1	27	31	6	6	5	9	28	20	4	6		
46	28.0	7	24	16	7	5	8	6	25	5	7	5	9	4	25	54	5	5	8	4	26	43	4	4	8	3	27	32	4	4	7	31	28	21	3	4				
47	2	2	9	24	20	5	3	29.0	8	25	8	5	3	0.1	6	25	57	3	2	1.0	6	26	45	3	2	2.0	5	27	34	2	2	9	4	28	22	1	2			
48	4	4	29.1	24	23	4	1	3	0.1	25	11	3	1	3	9	25	59	1	0	2	8	26	47	1	0	2	7	27	35	0	0	3	2	6	28	24	22	9	0	
49	7	7	4	24	27	18.2	17.9	6	3	25	15	2	18.9	6	1.1	26	2	19.9	19.8	5	2.1	26	50	20	9	20.8	5	9	27	37	21	8	21.8	4	8	28	25	7	22	8
50	29.0	7	24	31	1	7	9	6	25	18	0	6	9	4	26	5	8	6	8	3	26	52	7	6	8	3	27	39	6	8	7	4	1	28	29	5	8	3		
51	3	3	9	24	35	0	5	0.2	9	25	21	18.8	4	1.2	6	26	8	7	4	2.1	6	26	54	5	3	3.1	5	27	40	4	3	4	0	3	28	27	3	2		
52	6	6	0.2	24	39	17.8	3	5	1.1	25	25	6	2	5	9	26	11	5	1	4	8	26	56	3	1	4	7	27	42	2	0	3	5	28	28	1	21	9		
53	9	9	5	24	43	6	0	8	4	25	29	4	17.9	8	2.2	26	14	3	18.8	7	3.0	26	59	1	19.8	7	9	27	44	0	21.7	6	7	28	29	21	4	6		
54	0.2	0.2	8	24	48	4	16.7	1.1	7	25	32	2	6	21	5	26	17	1	5	3.0	3	27	1	19.9	5	4.0	4	22	46	20.8	4	9	5	28	31	7	3	3		
55	6	6	1.1	24	52	2	4	5	20	25	36	0	3	5	8	26	20	15.9	2	4	6	27	4	7	2	3	5	27	48	0	1	3	2	3	28	32	4	0		
56	1.0	1.0	4	24	56	0	1	9	3	25	40	17.8	0	9	3	1	26	23	7	17.9	8	9	27	6	3	18.9	7	8	27	3	4	1.8	6	6	25	33	1	20	7	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.														
SID. T. 5 51 17				5 55 38				6 00				6 4 22				6 8 43				6 13 5														
ARC 87° 49' 2				28°				11 29°				20° 0°				20° 1°				20° 2°														
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3									
Lat.	25	8	9	10	11	25	8	9	10	11	25	8	9	10	11	25	8	9	10	11	25	8	9	10	11									
22°	28.6	28.9	27.58	26.9	27.3	29.6	29.9	28.59	28.0	28.4	0.6	1.0	0	0.29	0.29.4	1.6	2.0	1	1	0.1	0.4	2.7	3.1	2	2	1.1	1.4	3.7	4.1	3	2	2.2	2.4	
23°	7.29	0	27.59	8	2	7	7	29	0	27.8	2	7	1	0	0.28.9	3	8	2	1	0	0	3	8	2	2	1	0	3	8	2	3	1	0	3
24°	9	2.28	0	6	1	9	2.29	0	7	1	9	3	0	0	7	1	9	3	1	0	29.8	1	9	4	2	0	0.8	1	4.0	4	259	1.8	1	
25°	29.0	4	28	1	5	26.9	8	4.29	1	6	0	1.0	4	0	0	6	0	2.0	4	0.59	6	0	3.1	5	1.59	6	0	1	5	258	7	0		
26°	2	5.28	2	26.4	8	0.2	5.29	1	4	27.8	2	1.6	0	0	4	28.8	2	2.6	0.59	5	29.8	2	3.6	1.58	5	0.8	2	4.6	257	5	1.8			
27°	3	7.28	3	2	7	3	7.29	1	27.3	7	3	7	0	0	28.3	7	3	7	0.59	3	7	3	8	1.57	3	7	4	8	255	3	7			
28°	5	8.28	4	1	5	4	8.29	2	1	5	4	9	0	0	1	6	5	9	0.58	2	6	5	9	1.56	2	5	4.5	9	254	2	5			
29°	29.6	7	28	5	25.9	26.4	0.6	1.0	29	2	0	4	1.6	2.0	0	0	0	4	2.6	3.0	0.58	0	4	3.6	4.1	1.55	0	4	6	5.1	253	0	4	
30°	8	0.28	6	8	2	7	1.29	3	26.8	2	8	2	0	0	27.8	2	8	2	0.57	28.9	3	8	2	1.54	29.8	2	8	2	251	0.8	2			
31°	9	3.28	7	7	1	9	3.29	3	7	1	9	4	0	0	6	1	9	3	0.57	7	1	9	3	1.53	7	1	9	3	250	7	1			
32°	0.1	5.28	8	5	25.9	1.1	5.29	4	5	26.9	2.1	5	0	0	5	27.9	3.1	5	0.56	5	28.9	4.1	5	1.52	5	29.9	5.1	5	248	5	0.9			
33°	2	7.28	9	25.4	8	2	7.29	4	3	8	2	7	0	0	3	8	2	7	0.56	3	8	2	4.6	1.51	3	8	2	5.6	247	3	8			
34°	4	8.28	10	2	6	4	8.29	5	2	6	4	9	0	0	1	6	4	8	0.55	2	6	4	8	1.50	2	6	4	7	246	1	6			
35°	6	1.028	11	1	4	6	2.029	5	0	4	5	3.0	0	0	0	5	6	4.0	0.55	0	4	6	9	1.49	0	4	5	9	244	29.9	4			
36°	8	2.28	11	24.9	3	7	2.29	6	25.9	3	7	2	0	0	26.8	3	7	1	0.54	27.8	3	7	5.1	1.49	28.8	2	7	6.0	243	7	2			
37°	9	4.28	12	7	1	9	3.29	6	8	1	9	4	0	0	6	1	9	2	0.54	7	1	9	3	1.48	6	1	9	1	241	6	1			
38°	1.1	5.28	13	6	24.9	2.1	5.29	7	6	25.9	3.1	5	0	0	5	26.9	4.1	4	0.53	5	27.9	5.1	4	1.47	5	28.9	6.1	2	240	4	29.9			
39°	3	7.28	14	4	7	3	7.29	7	5	7	3	7	0	0	3	7	3	4.5	0.53	3	7	3	6	1.46	3	7	2	4	238	2	7			
40°	5	9.28	15	2	6	5	9.29	8	25.3	6	5	8	0	0	2	5	4	7	0.52	1	5	4	8	1.45	1	5	4	6.6	237	0	5			
41°	7	2.128	16	1	4	7	3.129	8	1	4	7	4.0	0	0	0	3	6	9	0.52	26.9	3	6	9	1.44	27.9	3	6	7	235	28.8	3			
42°	9	3.28	17	23.9	2	9	3.29	9	0	2	9	2	0	0	25.8	1	8	5.0	0.51	7	1	8	6.1	1.43	7	1	8	9	234	6	1			
43°	2.1	5.28	18	7	0	3.1	5.29	9	24.8	24.9	4.1	4	0	0	6	25.9	5.1	2	0.51	5	26.9	6.0	3	1.42	5	27.9	7.0	7.1	232	3	28.8			
44°	3	7.28	19	6	23.8	3	7.29	10	6	7	3	5	0	0	5	7	3	4	0.50	3	7	2	4	1.41	3	7	2	2	231	1	6			
45°	5	9.28	20	4	6	6	9.29	10	4	5	5	7	0	0	3	5	5	6	0.50	1	4	4	6	1.40	1	5	4	4	229	27.9	4			
46°	7	3.128	21	3	4	8	4.129	11	2	3	7	9	0	0	1	3	7	8	0.49	25.9	2	6	7	1.39	26.9	3	6	6	228	7	2			
47°	9	4.28	22	1	2	4.0	3.29	11	23.9	1	9	5.1	0	0	24.9	1	9	6.1	0.49	7	0	8	9	1.38	6	1	8	8	226	5	0			
48°	3.2	6.28	24	22.9	0	2	5.29	12	7	23.9	5.1	3	0	0	7	24.9	6.1	3	0.48	5	25.8	7.0	7.1	1.36	4	26.8	8.0	8.0	225	3	27.8			
49°	4	8.28	25	7	22.8	5	7.29	12	5	7	3	6	0	0	4	7	3	5	0.48	3	5	2	3	1.35	2	6	2	2	223	1	5			
50°	7	4.128	26	5	5	7	9.29	13	3	4	6	8	0	0	2	4	6	7	0.47	1	3	5	5	1.34	25.9	3	5	4	221	26.8	2			
51°	4.0	3.28	27	3	2	5.0	5.129	13	1	2	9	6.0	0	0	0	1	8	9	0.47	24.9	0	8	7	1.33	7	0	7	6	220	5.26.9				
52°	3	5.28	28	1	21.9	3	3.29	14	22.9	22.9	6.2	2	0	0	23.8	23.8	7.1	7.1	0.46	7	24.7	8.1	9	1.32	5	25.7	9.0	8	218	3	6			
53°	6	7.28	29	21.9	6	6	5.29	15	7	6	5	4	0	0	6	5	4	3	0.45	5	4	4	8.1	1.31	3	4	3	9.0	216	1	3			
54°	9	5.028	31	7	3	9	8.29	15	5	3	8	7	0	0	3	2	7	5	0.45	2	1	7	3	1.29	0	1	6	2	214	25.8	0			
55°	5.2	3.28	32	4	0	6.2	6.129	16	2	0	7.1	7.0	0	0	0	22.9	8.0	8	0.44	23.9	23.8	9.0	6	1.28	24.7	24.8	9	4	212	5.25.7				
56°	6	6.28	33	1	20.7	5	3.29	16	0	21.7	4	2	0	0	22.8	6	3	8.0	0.44	7	5	3	9	1.27	4	4	10.2	6	210	2	3			

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th II.

H. M. S.						H. M. S.						H. M. S.						H. M. S.						H. M. S.													
SID. T. 6 17 26			6 21 47			6 26 9			6 30 30			6 34 50			6 39 11																						
90° 26' 9						95° 32' 2						97° 37' 4						98° 42' 6						99° 47' 7													
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3								
Lat.	Q	W	S	W	I	Q	W	S	W	I	Q	W	S	W	I	Q	W	S	W	I	Q	W	S	W	I	Q	W	S	W	I							
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°								
22	4.7	5.2	4	3	3.2	3.4	5.7	6.2	5	3	4.2	4.4	6.8	7.2	6	4	5.2	5.4	7.8	8.3	7	4	6.2	6.4	8.8	9.2	8	5	7.2	7.4	9.8	10.2	9	5	8.2	8.4	
23	8	3	4	1	0	3	9	3	5	1	0	3	9	4	6	1	0	3	9	4	7	1	0	3	9	3	8	1	1	3	10.0	4	9	1	0	3	
24	5.0	4	3	5.9	2.8	1	6.0	4	4	5.9	3.9	1	7.0	5	5	5.8	4.8	2	8.0	5	6	5.8	5.9	1	9.1	4	7	5.5	6.9	1	1	5	5.5	7.8	1		
25	1	5	3	5.7	7	0	1	5	4	5.7	7	0	1	6	5	5.6	7	0	2	6	6	5.5	7	0	2	5	7	5.4	7	0	2	6	5.5	7	0		
26	2	5.7	3	5.6	5	2.8	2	6.7	4	5.4	5	3.8	3	7	5	5.3	5	4.9	3	7	6	5.1	5	5.8	3	9.7	7	5.0	5	6.5	3	10.7	5	4.8	5	7.8	
27	4	8	3	5.4	3	7	4	8	4	5.2	3	7	4	8	5	5.0	3	7	4	8	6	4.8	3	7	4	8	7	4.7	3	7	10.4	5	8	4.4	3	7	
28	5.5	9	3	5.2	1	5	6.5	9	4	5.0	1	5	7.5	8.0	5	4.7	1	6	8.5	9.0	6	4.5	1	5	9.6	9	7	4.3	1	5	6	9	8	4.0	1	5	
29	6	6.1	3	5.0	0	4	7	7.1	4	4.7	0	4	7	1	5	4.5	3.9	4	7	1	6	4.2	4.9	4	7	10.0	7	3	9	5.9	4	7	11.0	8	3.6	6.9	
30	8	2	3	4.8	1.8	2	8	2	4	4.5	2.8	2	8	2	5	4.2	8	2	8	2	6	3.9	8	2	8	1	7	3.5	7	2	8	1	8	3.2	7	2	
31	9	3	3	4.6	6	1	9	3	4	4.3	6	1	9	3	5	3.9	6	1	9.0	3	6	3.5	6	1	10.0	3	7	3.2	5	1	11.0	3	8	2.8	5	0	
32	6.1	5	3	4.4	4	1.9	7.1	5	4	4.0	4	2.9	8.1	8.4	5	3.6	4	3.9	1	4	6	3.2	4	4.9	1	4	7	2.8	3	5.9	1	4	5	2.4	3	6.9	
33	2	6.6	3	4.3	3	7	2	7.6	4	3.8	2	7	2	6	5	3.3	2	7	2	9.6	6	2.9	2	7	2	10.5	7	2.4	1	7	2	11.5	8	2.0	1	7	
34	4	8	3	4.1	1	6	4	7	4	3.6	0	6	4	7	5	3.1	0	6	4	7	6	2.6	0	6	4	6	7	2.1	4	9	5	4	6	8	1.5	5.9	5
35	5	9	3	3.9	0.9	4	5	9	4	3.3	1.9	4	5	8	5	2.8	2.8	4	9.5	8	6	2.2	3.8	4	10.5	7	7	1.7	7	4	11.5	7	8	1.1	7	3	
36	7	7.0	3	3.7	7	2	7	8.0	4	3.1	7	2	7	9.0	5	2.5	6	2	7	9	6	1.9	6	2	7	7	9	7	1.3	5	2	7	8	5	7	5	2
37	9	2	3	3.5	5	0	9	1	4	2.9	5	0	9	1	5	2.2	4	0	9	10.1	6	1.6	3	0	9	11.0	7	9	3	0	9	12.0	8	3	3	0	
38	7.0	3	3	3.3	3	0.8	8.0	3	4	2.6	3	1.8	9.0	2	5	1.9	2	2.8	10.0	2	6	1.2	1	3.8	11.0	1	7	5	1	4.8	12.0	1	7	5.8	1	5.8	
39	2	5	3	3.1	1	7	2	4	4	2.4	1	6	2	3	5	1.6	0	6	2	3	6	9	2.9	6	2	2	7	1	3.9	6	2	2	7	5.4	4.9	6	
40	4	6	3	2.9	2.9	9	5	4	8.6	4	2.1	0.9	4	4	9.4	5	1.3	1.8	4	4	5	6	6	7	4	4	3	6	5.8	7	4	3	3	7	5.0	6	4
41	6	8	3	2.7	7	2	6	7	4	1.9	7	2	6	5	5	1.0	5	2	6	10.6	6	2	5	2	5	11.4	6	5.4	5	2	5	12.4	7	4.5	4	1	
42	8	8.0	3	2.5	5	0	8	9	4	1.6	5	0	8	7	5	7	3	0	7	7	5	5.9	3	2.9	7	5	6	5.0	2	3.9	7	6	7	4.1	1	4.9	
43	8.0	1	3	2.3	2	2.9	8	9.0	9	4	1.4	3	0.8	10.0	8	5	4	1	1.8	9	9	5	5.5	1	7	9	7	6	4.6	0	7	9	7	7.3	3	7	
44	2	3	3	2.1	0	6	2	2	4	1.1	1	5	2	10.0	5	1	0.8	6	11.1	11.0	5	5.1	1.8	5	12.1	8	6	4.1	2.7	4	15.1	8	7	3.1	6	4	
45	4	5	3	1.9	28.8	4	4	4	4	9	2.9	9	3	4	2	4	5.8	6	4	3	2	5	4.8	6	2	2	12.0	6	3.7	5	2	2	13.0	7	2.7	4	1
46	6	8.6	3	1.7	6	2	6	5	4	6	6	1	5	3	4	5.5	4	2	5	3	5	4.4	3	0	4	2	6	3.3	3	0	4	1	7	2.2	1	3.9	
47	8	7	3	1.5	4	0	8	7	4	3	4	2.9	9	7	5	4.5	2	0	7	5	5	4.0	1	1.8	6	4	6	2.9	0	2.8	6	3	7	1.7	2.8	7	
48	9.0	9	3	1.3	2	28.8	10.0	9	4	1	1	7	9	7	4	4	9	29.9	0.7	9	11.7	5	3.7	0.9	6	9	5	6	2.5	1.8	6	8	4	7	1.2	5	9
49	2	9.1	3	1.0	27.9	5	2	10.1	3	5.8	28.9	4	11.1	8	4	4	4.42	4	1	3	9	5.29	3	0	3	8	6	1.6	2	0	2	7	7	2	0	2.9	
50	4	3	3	8	7	2	4	2	3	5.5	6	1	4	11.0	4	4.2	4	1	3	9	5.29	3	0	3	13.0	6	1.1	0.9	1.7	4	8	6	5.7	1.7	0		
51	7	5	3	6	4	27.9	6	3	3	5.2	4	28.8	6	2	4	3.9	1	29.8	5	12.0	5	2.5	1	0.7	5	13.0	6	1.1	0.9	1.7	4	8	6	5.7	1.7	0	
52	9	7	3	4	2	6	9	5	3	4.9	1	5	8	4	4	3.5	28.9	5	7	2	5	2.1	29.8	4	7	1	6	6	6	4	6	9	6	5.2	4		
53	10.2	9	3	1	0	3	11.2	7	3	4.6	27.8	2	12.1	6	4	3.1	6	2	13.0	4	5	1.7	5	1	9	2	6	2	3	1	9	14.1	6	4.7	1	0	
54	5	10.1	2	5.9	26.7	0	5	9	3	4.3	5	27.9	4	8	4	2.8	3	28.9	3	6	5	1.2	2	29.8	4	14.2	4	5	8.7	0	7	1	3	6.4	0.8	1	
55	8	3	2.56	4	26.6	8	11.1	3	4.0	2	5	7	12.0	4	2.1	0	5	6	8	5	8.28	4	5	6	8.8	0.7	3	5	6	3.6	0	9					
56	11.1	5	2	5.4	1	2	12.1	3	3	3.7	26.9	1	13.0	2	4	20	27.7	1	9	13.0	5	3	6	0	8	8	4.7	2	29.9	8	7	0.7	1				

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.										
SID. T. 6 39 11 } $\frac{1}{20}$					6 43 31 } $\frac{1}{20}$ 10°					6 47 51 } $\frac{1}{20}$ 11°					6 52 11 } $\frac{1}{20}$ 12°					6 56 30 } $\frac{1}{20}$ 13°										
ARC 99° 47'.7 } 9°					100° 52'.8					101° 57'.8					102° 02'.7					103° 07'.5										
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	♈	♉	♊	♋	♌	♈	♉	♊	♋	♌	♈	♉	♊	♋	♌	♈	♉	♊	♋	♌	♈	♉	♊	♋	♌					
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					
22	9.8	10.2	9.5	8.2	8.4	10.9	11.3	10.5	9.2	9.4	11.9	12.3	11.5	10.2	10.4	12.9	13.4	12.5	11.2	11.4	14.0	14.4	13.5	12.2	12.4	15.0	15.5	14.4	13.2	13.4
23	10.0	4	9.1	0	3	11.0	4	10.0	0	3	12.0	4	11.0	0	0	13.0	5	11.59	0	3	1	5	12.59	0	3	1	6	13.58	0	2
24	1	5	8.57	7.8	1	1	5	9.56	8.9	1	1	5	10.55	9.8	1	2	6	11.54	10.8	1	2	6	12.53	11.8	1	2	7	13.52	12.8	1
25	2	6	8.53	7	0	2	6	9.51	7	0	3	6	10.50	6	0	3	7	11.49	6	0	3	7	12.47	6	0	3	8	13.46	6	12.9
26	3	10.7	8.48	5	7.8	4	11.7	9.47	5	8.8	4	7	10.45	4	9.8	4	8	11.43	4	10.8	4	8	12.41	4	11.8	5	9	13.39	4	8
27	10.4	8	8.44	3	7	11.5	8	9.42	3	7	12.5	9	10.40	2	7	13.5	9	11.38	2	7	14.5	9	12.36	2	6	15.6	9	13.33	2	6
28	6	9	8.40	1	5	6	9	9.38	1	5	6	13.0	10.35	0	5	6	14.0	11.33	0	5	7	15.0	12.30	0	5	7	16.0	13.27	0	5
29	7	11.0	8.36	6.9	4	7	12.0	9.33	7.9	4	7	11.0	30	8.8	3	8	11.27	9.8	3	8	1	12.24	10.8	3	8	1	13.21	11.8	12.3	
30	8	1	8.32	7	2	9	2	9.29	7	2	9	2	10.25	6	2	9	2	11.22	6	2	9	2	12.18	6	2	9	2	13.14	5	1
31	11.0	3	8.28	5	0	12.0	3	9.24	5	0	13.0	3	10.20	4	0	14.0	3	11.16	4	0	15.0	3	12.12	4	0	16.0	3	13.8	3	0
32	1	4	8.24	3	6.9	1	4	9.19	2	7.9	1	4	10.15	2	8.8	1	14.4	11.11	2	9.8	2	15.4	12.6	1	10.8	2	16.4	13.1	1	11.8
33	2	11.5	8.20	1	7	3	5	9.15	0	7	3	13.5	10.10	0	7	3	5.11	5	0	7	3	5.12	0	9.9	6	3	5.12	5.5	10.9	6
34	4	6	8.15	5.9	5	4	12.6	9.10	6.8	5	4	6	10.5	7.8	5	4	6	11.0	8.7	5	4	6	11.54	7	5	4	5	12.49	6	4
35	11.5	7	8.11	7	3	12.6	7	9.5	6	3	13.6	7	10.0	6	3	14.6	7	10.54	5	3	15.6	7	11.48	5	3	16.6	6	12.42	4	2
36	7	8	8.7	5	2	7	8	9.1	5	1	7	8	9.55	4	1	7	14.7	10.48	3	1	7	15.7	11.42	3	1	7	16.7	12.35	2	1
37	9	12.0	8.3	3	0	9	9	8.56	3	6.9	9	9	9.49	2	7.9	9	8	10.43	1	8.9	9	8	11.36	1	9.9	8	7	12.29	0	10.9
38	12.0	1	7.58	1	5.8	13.0	13.0	8.51	0	7	14.0	14.0	9.44	0	7	15.0	9	10.37	7.9	7	16.0	9	11.30	8.8	7	17.0	8	12.22	9.7	6
39	2	2	7.54	4.9	6	2	1	8.46	5.8	5	2	1	9.39	6.7	5	2	15.0	10.31	6	5	1	16.0	11.23	6	4	1	9	12.15	5	4
40	3	3	7.50	6	4	3	2	8.41	5	3	3	2	9.33	5	3	3	1	10.25	4	3	3	1	11.17	3	2	3	17.0	12.8	2	2
41	5	12.4	7.45	4	1	5	3	8.37	3	1	5	3	9.28	2	1	5	2	10.19	1	0	5	2	11.10	0	0	5	1	12.2	8.9	0
42	7	6	7.41	1	4.9	7	13.4	8.32	0	5.9	7	4	9.22	0	6.8	7	3	10.13	6.9	7.8	6	3	11.4	7.8	8.8	6	1	11.55	7	9.7
43	9	7	7.36	3.9	7	9	5	8.26	4.8	6	9	14.6	9.17	5.7	6	8	15.4	10.7	6	5	8	4	10.57	5	5	8	2	11.47	4	5
44	13.1	8	7.31	6	4	14.1	7	8.21	5	4	15.0	7	9.11	4	3	16.0	5	10.1	3	3	17.0	16.5	10.51	2	2	18.0	3	11.40	1	2
45	2	13.0	7.27	4	1	2	8	8.16	3	1	1	8	9.5	1	1	1	6	9.55	0	0	1	6	10.44	6.9	0	1	17.4	11.33	7.8	8.9
46	4	1	7.22	1	3.9	4	9	8.11	0	4.9	3	9	9.0	4.9	5.9	3	8	9.48	5.8	6.8	3	7	10.37	7	7.7	2	5	11.26	6	7
47	6	3	7.17	2.8	7	6	14.1	8.5	3.8	7	5	15.0	8.54	7	7	5	16.0	9.42	6	6	5	8	10.30	4	5	4	7	11.18	3	5
48	8	4	7.12	5	5	8	2	8.0	5	4	8	1	8.48	4	4	7	1	9.35	3	3	7	9	10.23	1	3	6	8	11.10	0	2
49	14.0	13.6	7.7	3	2	15.0	3	7.55	2	1	16.0	2	8.42	1	1	9	2	9.29	4.9	0	9	17.0	10.16	5.8	0	8	9	11.3	6.7	7.9
50	2	7	7.2	0	2.9	2	14.5	7.49	2.9	3.8	2	4	8.36	3.8	4.8	17.1	3	9.22	6	5.7	18.1	1	10.9	5	6.7	19.1	18.0	10.55	3	6
51	4	8	6.57	1.7	6	4	6	7.43	6	5	4	15.5	8.29	5	5	3	16.5	9.15	3	4	3	2	10.1	1	4	3	1	10.47	0	3
52	6	9	6.52	4	3	6	8	7.37	3	2	6	7	8.23	2	2	5	6	9.8	0	1	5	4	9.54	4.8	1	5	2	10.39	5.7	0
53	9	14.1	6.47	1	0	8	15.0	7.31	0	2.9	8	8	8.16	2.9	3.9	7	7	9.1	3.7	4.8	7	17.5	9.46	5	5.7	7	18.4	10.31	4	6.6
54	15.2	3	6.41	0.8	1.6	16.1	1	7.25	1.7	5	17.1	16.0	8.10	5	5	18.0	8	8.54	3	4	9	7	9.38	2	3	9	5	10.22	0	2
55	5	5	6.36	5	2	4	3	7.19	3	1	4	1	8.3	1	1	3	17.0	8.47	2.9	0	19.2	8	9.30	3.8	4.9	20.2	6	10.14	4.6	5.8
56	8	7	6.30	1	0.8	7	5	7.13	0.9	1.7	7	3	7.56	1.7	2.7	6	1	8.39	5	3.6	5	9	9.22	4	5	4	8	10.5	2	4

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

### UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																						
SID. T.	7 5 8	7 9 26	7 13 44	7 18 1	7 22 18	7 26 34	7 26 34	7 26 34	7 26 34	7 26 34	7 26 34																					
ARC 106° 16' 9)	15°	107° 21' 5)	16°	108° 25' 9)	17°	109° 30' 2)	18°	110° 34' 4)	19°	111° 38' 4)	20°																					
Lat.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3							
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°							
22	16.1	16.6	15 4	14.2	14.4	17.1	17.6	16 3	15.2	15.4	18.1	18.7	17 3	16.2	16.3	19.1	19.8	18 2	17.2	17.3	20.2	20.5	19 1	18.2	18.3	21.2	21.9	20 0	19.1	19.3		
23	2	6	14 57	0	2	2	7	15 56	0	2	2	8	16 55	0	2	2	8	17 54	0	2	3	9	18 52	17.9	1	3	9	19 51	18.9	1		
24	3	7	14 51	13.8	1	3	8	15 49	14.8	1	3	9	16 48	15.8	0	3	9	17 46	16.7	0	4	9	18 44	17	0	4	22	0	19 42	7	0	
25	4	8	14 44	6	13.9	4	9	15 42	6	14.9	4	9	16 40	5	15.9	4	20.0	17 38	5	16.9	5	21.0	18 36	5	17.8	5	0	19 33	4	18.5		
26	5	9	14 37	4	8	17.5	9	15 35	3	7	18.5	19.0	16 33	3	7	19.5	0	17 30	3	7	20.6	1	18 27	3	7	21.6	1	17.4	2	6		
27	16.6	17.0	14 31	2	6	6	18.0	15 28	1	6	6	11	16 25	1	6	7	11	17 22	1	5	7	11	18 19	0	5	7	11	19 16	0	5		
28	7	1	14 24	12.9	4	7	1	15 21	13.9	4	8	1	16 18	14.9	4	8	2	17 14	15.8	4	8	2	18 10	16.5	3	8	2	19 7	17.7	3		
29	8	1	14 17	7	3	8	2	15 14	7	3	9	2	16 10	6	2	9	2	17 6	6	2	9	2	18 2	6	2	9	22 2	18 58	5	1		
30	9	2	14 10	5	1	18.0	2	15 6	5	1	19.0	3	16 2	4	1	20.0	20.3	16 58	4	0	21.0	21.3	17 53	3	0	22.0	3	15 49	3	0		
31	17.1	3	14 4	3	12.9	1	3	14 59	2	13.9	1	9.3	15 54	2	14.9	1	3	16 50	1	15.9	1	3	17 45	1	16.8	1	3	15 40	0	17.8		
32	2	17.4	13 57	0	8	2	18.4	14 52	0	8	2	4	15 47	13.9	7	2	4	16 42	14.9	7	2	4	17 36	15.8	7	3	4	15 31	16.8	6		
33	3	5	13 50	11.8	6	3	5	14 44	12.8	6	3	5	15 39	7	5	3	5	16 33	6	5	4	4	17 27	6	5	4	4	15 22	5	4		
34	4	5	13 43	6	4	18.4	5	14 37	5	4	19.5	5	15 31	5	4	20.5	20.5	16 25	4	3	21.5	5	17 19	3	3	22.5	22.5	15 12	2	2		
35	17.6	6	13 36	3	2	6	6	14 30	3	2	6	6	15 23	2	2	6	6	16 17	1	1	6	21.5	17 10	1	1	6	5	18 3	0	0		
36	7	17.7	13 29	1	0	7	18.7	14 22	1	0	7	19.6	15 15	12.9	0	7	6	16	8	13 9	14.9	7	6	17	1	14 8	15.9	7	6	17 54	15 7	16.8
37	8	8	13 22	10.9	11.8	9	8	14 15	11.9	12.8	9	7	15 7	7	7	13.8	9	7	16 0	6	7	9	7	16 52	5	7	9	6	17 44	5	0	
38	18.0	9	13 15	7	6	19.0	8	14 7	6	6	20.0	8	14 59	5	5	21.0	20.8	15 51	4	5	22.0	7	16 43	3	5	23.0	22.7	17 35	3	4		
39	1	9	13 7	4	4	1	9	13 59	3	4	1	9	14 51	2	3	1	8	15 43	1	3	1	21.5	16 34	1	2	1	7	17 25	0	2		
40	3	18.0	13 0	1	2	3	19.0	13 51	0	1	3	9	14 43	11.9	1	3	9	15 34	12.9	1	3	8	16 25	13.8	0	3	7	17 16	14.7	0		
41	5	1	12 53	9.8	10.9	4	1	13 43	10.8	11.9	4	20.0	14 34	7	12.9	4	9	15 25	6	13.8	4	9	16 16	5	14.8	4	8	17 6	4	15.7		
42	6	2	12 45	6	7	19.6	1	13 35	5	6	20.6	1	14 26	4	6	21.6	21.0	15 16	3	6	22.6	9	16 6	2	8	23.6	22.8	16 9	0	5		
43	8	3	12 37	3	4	8	2	13 27	2	4	7	1	14 17	1	3	7	11 5	7	0	3	7	22.0	15 57	12.9	3	7	8	16 46	13.7	2		
44	19.0	18.4	12 30	0	2	9	19.3	13 19	9.9	1	9	2	14 9	10.8	1	9	2	14 58	11.6	0	9	11 54	7	0	9	9	16 36	4	0			
45	1	5	12 22	8.7	9.9	20.1	4	13 11	6	10.9	21.1	3	14 0	5	11 8	22.1	2	14 49	3	12.8	23.1	1	15 37	2	13.7	24.0	9	16.6	7	14.7		
46	2	6	12 14	4	6	2	5	13 2	3	6	2	20.4	13 51	1	5	2	3	14 39	0	5	2	2	21.5	27	11.9	4	2	23.0	16 18	12.7	4	
47	4	6	12 6	1	4	4	6	12 54	0	4	4	4	13 12	9.8	3	3	21 3	14 30	10.7	2	4	21 5	17	6	2	3	16 3	4	1	1		
48	6	18.7	11 58	7.8	1	6	19.7	12 45	8.7	1	5	5	5	13 33	5	0	5	4	14 20	4	0	6	22 3	15 7	3	12.9	4	14 34	11.8	0		
49	8	8	11 50	5	8.8	8	8	12 36	4	9.8	7	5	13 23	2	10.7	7	3	14 10	1	11.7	8	3	14 57	10.9	0	24.0	1	18 47	11.8	0		
50	20.0	9	11 41	2	5	21.0	8	12 28	0	5	5	9	20 6	13 14	8.9	4	9	5	14 0	9.7	4	9	4	14 46	6	3	8	14 18	4	2		
51	2	19.0	11 33	6.8	2	2	9	12 19	7.7	2	22.1	7	13 4	5	12.3	1	6	13 30	4	12.4	0	4	14 38	11.9	0	9.3	13 17	11.2	0			
52	4	1	11 24	5	7.9	4	20.0	12 9	4	8.9	3	8	12 54	2	9.8	3	21 7	13 39	0	10.1	2	22 3	14 4	7.8	0	8.1	15 9	10.6	0			
53	6	2	11 15	2	6	6	1	12 0	0	0	5	5	9	12 44	7.8	4	5	7	13 29	8.6	3	6	6	14 13	4	3	3	6	14 97	2	2	
54	8	3	11 6	5.8	2	8	2	11 50	6.6	1	7	21 0	12 34	1	0	7	8	13 18	2	9.9	6	6	14 1	11 9	0	6	6	14 40	7	8 17		
55	21.1	4	10 57	4	6.8	22.0	3	11 40	2	7.7	23.0	1	12 24	0	8.6	9	3	12 7	7.8	5	8	7	13 51	8.6	4	7	9	13	4	0		
56	3	5	10 48	0	3	2	4	11 30	5.8	2	2	2	12 13	6.6	1	2	12 1	22 0	12 56	4	0	2	7	13 38	2	9.9	0	6	6	14 1	0	0

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

		H. M. S.						H. M. S.						H. M. S.						H. M. S.						H. M. S.											
		SID. T. 7 26 34			7 30 49			7 35 5			7 39 19			7 43 33			7 47 47																				
		20°						21°						22°						23°						24°											
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3							
Lat.	♀	☿	♃	♄	♅	♆	♇	♃	♄	♅	♆	♇	♃	♄	♅	♆	♇	♃	♄	♅	♆	♇	♃	♄	♅	♆	♇	♃	♄	♅	♆	♇					
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	
22	21.2	21.9	20.0	19.1	19.3	22.3	23.0	20.5	20.1	20.2	23.3	24.0	21.57	21.1	21.2	24.4	25.0	22.55	22.1	22.2	25.4	26.1	23.53	23.0	23.2	26.4	27.1	24.51	24.0	24.1	24.0	24.1	24.0	24.1			
23	3	9	19	51	18.9	1	4	0	20	49	19.9	1	4	0	21	47	20.8	1	5	1	22	45	21.8	0	5	1	23	43	22.8	0	5	1	24	40	23.7	0	
24	4	22.0	19	42	7	0	5	0	20	40	6	19.9	5	1	21	38	6	20.9	5	1	22	35	6	21.9	6	1	23	32	5	22.8	6	1	24	29	5	23.8	
25	5	0	19	33	4	18.8	6	1	20	31	4	8	6	1	21	28	4	7	6	1	22	25	3	7	7	1	23	22	3	7	7	2	24	18	2	6	
26	21.6	1	19	24	2	6	22.7	1	20	21	2	6	23.7	1	21	18	1	6	24.7	2	22	15	1	6	25.8	2	23	11	0	5	8	2	24	7	0	5	
27	7	1	19	16	0	5	8	23.2	20	12	18.9	5	8	24.2	21	9	19.9	4	8	25.2	22	5	20.8	4	9	26.2	23	1	21.8	3	9	27.2	23	56	22.7	3	
28	8	2	19	7	17.7	3	9	2	20	3	7	3	9	2	20	59	6	2	9	2	21	54	6	2	9	2	22	50	5	2	27.0	2	23	45	5	1	
29	9	22.2	18	58	5	1	23.0	2	19	53	5	1	24.0	2	20	49	4	1	25.0	2	21	44	3	0	26.0	2	22	39	3	0	1	2	23	34	2	0	
30	22.0	3	18	49	3	0	1	3	19	44	2	18.9	1	3	20	39	2	19.9	1	3	21	34	1	20.9	1	3	22	29	0	21.8	2	3	23	23	0	22.8	
31	1	3	18	40	0	17.8	2	3	19	35	0	8	2	3	20	29	18.9	7	2	3	21	24	19.8	7	2	3	22	18	20.8	6	3	3	23	12	21.7	6	
32	3	4	18	31	16.8	6	3	23.4	19	25	17.7	6	3	24.3	20	19	7	5	3	25.3	21	13	6	5	3	26.3	22	7	5	5	4	27.3	23	1	4	4	
33	4	4	18	22	5	4	4	4	19	16	5	4	4	4	20	9	4	4	4	4	21	3	3	3	4	3	21	56	2	3	27.5	3	22	50	2	2	
34	22.5	22.5	18	12	2	2	23.5	4	19	6	2	2	24.5	4	19	59	1	2	25.5	4	20	52	0	1	26.5	4	21	46	0	1	6	3	22	38	20.9	0	
35	6	5	18	3	0	0	6	5	18	56	16.9	0	6	4	19	49	17.8	0	6	4	20	42	18.8	19.9	6	4	21	35	19.7	20.9	7	3	22	27	6	21.8	
36	7	6	17	54	15.7	16.8	7	5	18	47	7	17.8	7	5	19	39	6	18.8	8	4	20	31	5	7	8	4	21	23	4	7	8	3	22	15	3	6	
37	9	6	17	44	5	6	9	23.6	18	37	5	6	9	24.5	19	28	3	6	9	25.4	20	21	2	5	9	26.4	21	12	1	5	9	27.3	22	4	0	4	
38	23.0	22.7	17	35	3	4	24.0	6	18	27	2	4	25.0	6	19	18	0	3	26.0	4	20	10	17.9	3	27.0	4	21	1	18.8	3	28.0	4	21	52	19.7	2	
39	1	7	17	25	0	2	1	7	18	17	15.9	2	1	6	19	8	16.7	1	1	5	19	59	6	1	1	5	20	50	5	0	1	4	21	41	4	0	
40	3	7	17	16	14.7	0	3	7	18	7	6	16.9	3	6	18	57	4	17.9	2	5	19	48	3	18.9	2	5	20	38	2	19.8	2	4	21	29	1	20.8	
41	4	8	17	6	4	15.7	4	7	17	56	2	7	4	7	18	47	0	6	4	5	19	37	16.9	6	4	5	20	27	17.8	6	4	4	21	17	18.7	5	
42	23.6	22.8	16	56	0	5	24.5	23.8	17	46	14.9	4	25.5	24.7	18	36	15.7	4	26.5	25.5	19	25	6	3	27.5	26.5	20	15	5	3	28.5	27.4	21	4	2		
43	7	8	16	46	13.7	2	7	8	17	36	6	2	7	7	18	25	4	1	7	5	19	14	3	1	6	6	20	3	2	0	6	4	20	52	0	0	
44	9	9	16	36	4	0	8	9	17	25	3	15.9	8	8	18	14	1	16.9	8	6	19	2	0	17.8	8	6	19	51	16.9	18.8	8	4	20	39	17.7	19.7	
45	24.0	9	16	26	1	14.7	25.0	9	17	14	13.9	6	26.0	8	18	2	14.8	6	27.0	6	18	50	15.7	5	9	6	19	39	6	5	9	4	20	26	4	4	
46	2	23.0	16	15	12.7	4	1	24.0	17	3	6	4	1	8	17	51	5	3	1	25.6	18	38	3	2	28.0	6	19	26	2	2	29.0	5	20	13	1	1	
47	3	0	16	5	4	1	2	0	16	52	3	1	2	24.9	17	39	1	0	2	7	18	26	0	0	0	1	26.7	19	14	15.8	17.9	1	27.5	20	0	16.7	18.8
48	4	1	15	54	1	13.8	4	0	16	41	0	14.8	4	9	17	28	13.8	15.7	3	7	18	14	14.7	16.7	3	7	19	1	5	6	3	5	19	47	4	5	
49	24.6	1	15	43	11.8	5	25.6	1	16	29	12.6	5	26.5	9	17	16	5	4	27.5	7	18	2	3	3	5	7	18	48	2	3	4	5	19	33	0	2	
50	8	2	15	32	4	2	8	1	16	18	2	1	7	9	17	3	1	1	7	25.8	17	49	13.9	0	28.6	7	18	34	14.8	16.9	29.6	5	19	19	15.6	17.9	
51	9	23.3	15	21	0	12.9	9	24.1	16	6	11.8	13.8	8	25.0	16	51	12.7	14.8	8	8	17	36	5	15.7	7	7	18	21	4	6	7	5	19	5	2	6	
52	25.1	3	15	9	10.6	5	26.1	2	15	54	4	5	27.0	0	16	38	3	4	9	9	17	23	1	3	9	26.8	18	7	0	2	9	27.6	18	51	14.8	2	
53	3	4	14	57	2	1	3	3	15	41	0	1	2	1	16	25	11.9	1	28.1	9	17	9	12.7	14.9	29.1	8	17	53	13.6	15.8	5	3	6	18	36	4	16.8
54	5	4	14	45	9.8	11.7	5	3	15	29	10.6	12.7	4	1	16	12	5	13.7	3	26.0	16	55	3	5	3	8	17	38	1	4	0.2	6	18	21	13.9	4	
55	7	5	14	33	4	3	7	4	15	16	2	3	6	2	15	59	0	2	5	0	16	41	11.8	1	5	5	8	17	24	6	0	4	6	18	6	4	15.9
56	9	6	14	20	0	10.9	9	5	15	3	9.8	11.8	8	3	15	45	10.6	12.7	7	1	16	27	3	13.6	7	9	17	9	12.1	14.5	6	7	17	50	12.9	4	

TABLE OF HOUSES FOR LATITUDES  $22^{\circ}$  TO  $56^{\circ}$ .

### UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.										
SID.	T.	7 51 59	26°	117° 59' 9"	7 56 12	26°	119° 2' 9"	8 0 23	26°	120° 5' 8"	8 4 34	26°	121° 8' 5"	8 8 44	26°	122° 11' 1"	8 12 54	26°	123° 13' 4"											
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o					
22	27.5	28.2	25.49	25.0	25.1	28.5	29.2	26.46	25.9	26.1	29.6	0.2	27.43	26.9	27.0	0.6	1.2	28.40	27.9	28.0	1.7	2.2	29.37	25.5	28.9					
23	6	22	25.37	24.7	24.9	6	22	26.34	7	25.9	7	22	27.31	7	26.8	7	22	28.27	6	27.8	7	22	29.24	5	8	8	2020	5	7	
24	7	22	25.26	5	8	7	22	26.22	4	7	7	22	27.19	4	7	8	22	28.15	3	6	8	22	29.11	3	6	9	207	2	6	
25	7	22	25.14	2	6	8	22	26.10	2	6	8	22	27.7	1	5	9	22	28.3	1	5	9	22	28.55	0	4	9	22954	28.9	4	
26	8	22	25.3	0	4	9	22	25.59	24.9	4	9	22	26.55	25.9	4	9	22	27.50	26.8	3	2.0	22	28.45	27.7	3	3.0	3.2	29.41	7	2
27	9	28.2	24.52	23.7	3	9	29.2	25.47	7	2	9	0.2	26.43	6	2	1.0	1.2	27.38	5	1	1	2.2	28.33	5	1	1	12927	4	0	
28	28.0	22	24.41	5	1	29.0	22	25.36	4	1	0.1	22	26.30	4	0	1	22	27.25	3	0	1	22	28.20	22.79	2	12914	1289			
29	1	22	24.29	2	23.9	1	22	25.24	2	24.9	2	22	26.18	1	25.8	2	22	27.13	0	26.8	2	128	726.9	7	3	129	1279	7		
30	2	22	24.18	0	7	2	22	25.12	23.9	7	2	22	26.6	24.8	7	3	22	27.0	25.7	6	2.3	127	54	6	6	3.3	3.1	2847	6	5
31	3	22	24.6	22.7	6	3	22	25.0	6	5	3	22	25.54	5	5	1.4	22	26.47	5	4	4	127	41	4	4	4	12534	3	3	
32	4	28.2	23.55	4	4	4	29.2	24.48	3	3	4	0.2	25.41	3	3	5	1.2	26.34	2	2	5	2.1	27.27	1	2	5	12820	0	1	
33	28.5	3	23.43	1	2	29.5	22	36	1	1	0.5	22	25.29	0	1	5	126	22.24.9	0	6	127	1425.8	0	6	028	6267279				
34	6	3	23.31	21.9	0	6	22	24.24	22.8	0	6	22	25.16	23.7	24.9	6	126	9	625.9	2.7	127	1	526.8	3.7	30	2753	4	8		
35	7	3	23.19	6	22.8	7	22	24.12	5	23.8	7	22	25.4	4	4	7	1.7	125	56	3	7	8	126	47	2	6	8	02739	1	6
36	8	3	23.7	3	6	8	22	23.59	2	6	8	22	24.51	1	5	8	125	42	0	5	8	026	3424.9	4	9	02724	25.8	4		
37	9	28.3	22.55	0	4	9	29.2	23.47	21.9	3	9	0.2	24.38	22.8	3	9	1.1	25.29	23.7	2	9	2.0	26.20	6	2	4.0	02710	4	1	
38	29.0	3	22.43	20.7	2	9	22	34	6	1	1.0	22	24.25	5	1	2.0	125	16	4	0	30	026	6	3	0	0292656	1269			
39	1	3	22.31	3	21.9	0.1	22	32	3	22.9	1	22	24.12	2	23.8	1	125	2	124.8	1	02552	025.7	1	9264224.5	7					
40	2	3	22.19	0	7	2	22	3	920.9	7	2	22	23.58	21.8	6	2	124	45	22.7	6	2	025	3823.6	5	2	92627	4	5		
41	4	3	22.6	19.7	5	3	22	25.6	6	4	3	22	23.45	5	4	3	1.1	24.34	4	3	3	02523	2	3	4.3	02612	1	2		
42	29.5	28.3	21.53	3	2	529.2	22.42	2	1	5	0.2	23.31	1	1	5	0.24	20	0	0	4	1.9	25	922.9	0	4	8255723.7259				
43	6	3	21.40	0	20.9	0.6	22	22.29	19.9	21.9	1.6	123	17	20.8	22.8	2.6	0.24	621.6	23.8	3.5	92454	524.7	6	282542	3	7				
44	7	3	21.27	18.6	7	7	22	22.16	5	6	7	123	3	4	5	7	023	51	3	5	6	92439	1	4	7	82526	0	4		
45	9	4	21.14	3	4	8	22	22.2	2	2	3	8	122	49	0	3	8	1.0	23.37	20.9	2	7	9242421.7	2	4.7	8231122.6	1			
46	9	4	21.1	17.9	1	9	22	21.48	18.8	0	9	122	35	19.6	0	9	023	22	522.9	8	9245	323.9	8	72455	224.8					
47	0.1	28.4	20.47	5	19.8	1.0	29.2	21.34	5	20.7	2.0	0.1	22	20	321.7	3.0	0.23	7	2	6	9	1.8	23.5320.9	6	9	7243921.8	3			
48	2	4	20.33	2	5	2	22	19	1	4	1	122	518.9	4	1	0.22	51	19.8	3	4.0	82337	5	2	90	272422	4	2			
49	4	4	20.19	16.8	2	3	22	21	517.7	0	2	121	50	5	0	3	0.9	22.35	4	0	1	82321	122.9	2	7245	023.9				
50	5	4	20.5	4	18.8	5	22	20.50	319.7	4	121	35	120.7	4	4	922	19	18.921.6	3	8234419.7	5	3	6234920.6	5						
51	7	4	19.50	0	5	1.6	22	20.35	16.9	4	2.5	121	19	17.7	4	3.5	922	3	5	3	4	82247	3	2	4	62331	1	2		
52	8	28.4	19.35	15.6	1	8	29.2	20.19	5	0	7	0.1	21	3	3	0	6	92147	120.9	4.5	17223018.921.7	3.5	20	2131319.622.5						
53	1.0	4	19.20	2	17.7	9	22	20	3	0	18.6	8	020	47	16.819.6	8	0.9	21	3017.6	9	6	72212	4	6	72255	1	4			
54	1	4	19.4	7	3	2.1	21	19	15.5	2	3.0	020	30	3	1	9	92112	1	1	8	7215517.9	0	8	6223715.621.9						
55	3	4	18.49	14.2	16.8	3	21	19	31	0	17.8	2	020	13	15.818.7	4.1	826	316.619.6	3.0	62156	420.6	6.0	42218	1	4					
56	5	5	18.32	13.7	3	4	21	19	14	14.5	3	3	019	55	3	1	2	82037	1	1	1	62118	16.9	0	1	4215917.620				

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.										
SID. T. 8 12 54 } 1°					8 17 3 } 2°					8 21 11 } 3°					8 25 18 } 4°					8 29 25 } 5°										
ARC 123° 13'.4 }					124° 15'.6 }					125° 17'.7 }					126° 19'.5 }					127° 21'.2 }										
II.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	��	分	秒	時	分	��	分	秒	時	分	��	分	秒	時	分	��	分	秒	時	分	秒	時	分	秒						
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°						
22	2.7	3.2	0.33	29.7	29.9	3.8	4.3	1.29	0.6	0.8	4.9	5.2	2.25	1.6	1.8	5.9	6.3	3.21	2.5	2.7	6.9	7.2	4.17	3.5	3.7					
23	8	2	0.20	5	7	9	2	1.16	4	7	9	2	2.12	3	6	6.0	2	3.7	3	6	7.0	2	4.2	2	5					
24	9	2	0.7	2	6	9	2	1.2	1	5	5.0	2	1.58	1	5	0	2	2.53	0	4	1	2	3.48	2.9	4					
25	9	2	29.54	28.9	4	4.0	2	0.49	29.8	3	1	2	1.44	0.8	3	1	1	2.39	1.7	2	1	1	3.33	6	2					
26	3.0	3.2	29.41	7	2	1	2	0.35	6	2	1	5.1	1.30	5	1	2	1	2.24	4	1	2	7.1	3.18	4	0					
27	1	1	29.27	4	0	1	4.1	0.22	3	0	2	1	1.16	2	0	2	6.1	2.10	2	1.9	3	0	3.4	1	2.8					
28	2	1	29.14	1	28.9	2	1	0.8	0	29.8	3	1	1.2	0	0.8	6.3	0	1.55	0.9	7	7.3	0	2.49	1.8	7					
29	3	1	29	1	27.9	7	4.3	1	29.54	28.7	6	5.3	0	0.48	29.7	6	4	0	1.41	6	5	4	0	2.34	5	5				
30	3.3	3.1	28.47	6	5	4	1	29.40	5	5	4	5.0	0.34	4	4	4	0	1.26	3	4	5	6.9	2.19	2	3					
31	4	1	28.34	3	3	5	4.0	29.27	2	3	5	0	0.19	1	2	5	5.9	1.12	0	2	5	9	2	4	0.9					
32	5	1	28.20	0	1	5	0	29.13	27.9	1	6	0	0	5	28.8	0	6	9	0.57	29.7	0	6	8	1.49	6	1.9				
33	6	0	28	6	26.7	27.9	4.6	0	28.59	6	28.9	5.7	4.9	29.51	5	29.8	6.7	9	0.42	4	0.8	7.7	8	1.34	3	7				
34	3.7	3.0	27.53	4	8	7	0	28.44	3	7	7	9	29.36	2	7	8	8	0.27	1	6	8	8	1.18	0	5					
35	8	0	27.39	1	6	8	3.9	28.30	0	5	8	9	29.21	27.9	5	8	8	0.12	28.8	4	8	6.7	1	3.29	6	3				
36	9	0	27.24	25.8	4	9	9	28.16	26.6	3	9	8	29	6	5	3	9	5.8	29.57	4	2	9	7	0.47	3	1				
37	4.0	0	27.10	4	1	5.0	9	28	1	3	1	6.0	8	28	51	2	0	7.0	7	29	41	1	0	8.0	6	0.31	0			
38	0	2.9	26.56	1	26.9	1	9	27	46	0	27.9	1	4.8	28	36	26.9	28.8	1	7	29	26	27.8	29.8	1	6	0	15			
39	1	9	26	42	24.8	7	2	8	27	31	25.6	6	2	7	28	21	5	6	2	6	29	10	5	5	2	5	29	59		
40	2	9	26	27	4	5	3	3.8	27	16	3	4	2	7	28	5	2	4	2	6	28	54	1	3	2	6.5	29	43		
41	4.3	9	26	12	1	2	5.4	8	27	1	24.9	2	6.3	7	27	49	25.8	1	7.3	5.5	28	38	26.8	0	3	4	29	26	5	
42	4	8	25	57	23.7	25.9	5	7	26	45	5	26.9	4	6	27	34	4	27.8	4	5	28	22	4	28.8	8.4	4	29	9	1	
43	6	2.8	25	42	3	7	6	7	26	30	2	6	5	4.6	27	17	0	6	5	4	28	5	0	5	5	3	28	52	26.7	
44	7	8	25	26	0	4	6	7	26	14	23.8	3	6	5	27	1	24.6	3	6	4	27	48	25.6	2	5	3	28	35	3	
45	4.7	8	25	11	22.6	1	5.7	3.6	25	58	5	1	6.6	5	26	44	3	0	7.7	4	27	31	2	27.9	6	6.2	28	17	25.9	
46	8	7	24	55	2	24.8	8	6	25	41	1	25.8	7	5	26	27	23.9	26.7	7	5.3	27	14	24.8	6	8.7	22	0	6		
47	9	7	24	39	21.8	5	9	6	25	25	22.7	4	9	4	26	10	5	4	8	3	26	56	3	3	8	1	27	42	2	
48	5.0	2.7	24	22	4	2	6.0	5	25	8	3	1	7.0	4.4	25	53	1	1	9	2	26	38	23.9	0	9	1	27	23	24.7	
49	2	7	24	5	0	23.9	1	3.5	24	50	21.9	24.8	1	3.25	35	22.7	25.7	8.0	2	26	20	4	26.7	9	0	27	4	3		
50	3	6	23	49	20.6	5	2	5	24	33	4	4	2	3	25	17	2	3	1	5.1	26	1	0	3	9.0	5.9	26	45	23.8	
51	4	6	23	31	1	2	3	4	24	15	20.9	1	3	2	24	59	21.7	0	2	1	25	42	22.5	0	1	9	26	26	3	
52	5.5	2.6	23	13	19.6	22.8	6.4	4	23	57	4	23.7	7.4	4.2	24	40	2	24.6	3	0	25	23	0	25.6	2	8.26	6	22.8	5	
53	7	5	22	55	1	4	6	3.3	23	38	19.9	3	5	2	24	21	20.7	2	8.4	0	25	3	21.5	2	3	8	25	45	3	
54	8	5	22	37	18.6	21.9	7	3	23	19	4	22.8	6	1	24	1	22.38	5	4.9	24	43	0	24.7	9.4	5.7	25	25	21.8	25.6	
55	6.0	4	22	18	1	4	9	2	23	0	18.9	3	8	0	23	41	19.7	3	7	8	24	22	20.5	2	6	6	25	3	1	
56	1	4	21	59	17.6	20.9	7.0	2	22	40	4	21.8	9	0	23	20	1	22.8	8	8	24	1	19.9	23.7	7	6	24	42	20.7	24.6

TABLE OF HOUSES FOR LATITUDES  $22^{\circ}$  TO  $56^{\circ}$ .

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.						H. M. S.						H. M. S.						H. M. S.																				
SID. T. 8 37 36			8 41 41			8 45 44			8 49 48			8 53 50			8 57 52																							
ARC 120° 24' 0		7°		130° 25' 2		131° 26' 1		132° 26' 9		133° 27' 5		134° 27' 9		12°																								
Lat.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3													
22°	9.0	9.2	6	7	5.3	5.6	10.0	10.2	7	2	6.3	6.5	11.1	11.2	7	57	7.2	7.4	12.1	12.2	8	51	8.1	8.4	13.1	13.1	9.46	9.0	9.3	14.1	14.1	10.40	9.9	10.3				
23	1	2	5	52	0	4	1	2	6	47	0	3	1	1	7	41	6.9	3	1	1	8	35	7.8	2	2	1	9	29	8.7	2	2	0	10.23	6	1			
24	1	1	5	37	4.8	2	1	1	6	31	5.7	2	2	1	7	25	6	1	2	0	8	19	5	1	2	0	9	12	4	0	2	0	10.0	3	9.9			
25	2	1	5	21	5	1	2	0	6	15	4	0	2	0	7	9	3	0	2	0	8	3	2	7.9	3	12.9	8	56	1	9.8	3	13.9	9	49	0	5		
26	3	0	5	6	2	4.9	3	0	6	0	1	5.9	3	10.9	6	53	0	6.8	12.3	11.9	7	46	6.9	7	13.3	9	8	39	7.5	7	3	8	9	32	8.7	6		
27	9.3	0	4	51	3.9	7	10.3	9.9	5	44	4.8	7	11.3	9	6	37	5.7	6	3	8	7	30	6	6	4	8	8	22	5	5	14.4	7	9	15	4	4		
28	4	8.9	4	35	6	6	4	9	5	28	5	5	5	4	8	6	21	4	4	4	8	7	13	3	4	4	4	7	8	5	2	3	4	7	8	55	1	3
29	4	9	4	20	3	4	4	8	5	12	2	3	5	8	6	4	1	3	5	7	6	57	0	2	5	6	7	48	6.9	1	5	13.6	8	40	7.8	1		
30	5	8	4	4	0	2	5	8	4	56	3.9	1	5	10.7	5	48	4.8	1	12.5	6	6	40	5.7	0	13.5	12.6	7	31	6	0	5	5	8	23	5	89		
31	6	8	3	48	2.7	0	6	9.7	4	40	6	0	6	6	5	31	5	5.9	6	11.6	6	23	4	6.8	6	5	7	14	3	7.8	14.6	4	8	5	2	7		
32	9.6	7	3	32	4	3.8	10.6	6	4	24	3	4.8	11.6	6	5	15	2	7	6	5	6	6	1	6	6	4	6	57	5.9	6	6	6	3	7	48	6.8	5	
33	7	8.7	3	16	1	6	7	6	4	7	0	6	7	5	4	58	3.9	5	7	4	5	49	4.8	5	7	3	6	39	6	4	7	13.3	7	30	5	3		
34	8	6	3	0	1.8	4	8	5	3	51	2.7	4	8	10.4	4	41	5	3	12.8	4	531	4	3	13.7	12.3	6	22	3	2	7	2	7	12	2	1			
35	8	6	2	44	4	2	8	9.5	3	34	3	2	8	4	4	24	2	1	8	3	5	14	1	1	8	2	6	4	49	0	14.8	1	6	53	5.8	79		
36	9	5	2	27	1	0	9	4	3	17	0	0	9	3	4	7	2.8	4.9	9	11.2	4	56	3.7	5.8	9	1	5	46	6	6.8	8	0	6	35	5	7		
37	10.0	8.4	2	11	0.7	2.8	11.0	3	3	0	1.6	3.8	12.0	2	3	49	5	7	9	1	4	39	4	6	9	0	5	28	2	6	9	12.9	6	16	1	5		
38	1	4	1	54	4	6	0	3	2	43	3	5	0	10.2	3	32	1	5	13.0	1	4	21	0	4	14.0	11.9	5	9	38	4	9	8	5	57	4.7	3		
39	1	3	1	37	0	4	1	9.2	2	26	0.9	3	1	1	3	14	1.8	2	1	0	4	2	2.6	2	0	9	4	50	5	1	15.0	7	538	3	1			
40	2	3	1	20	29.7	1	2	2	2	8	5	1	2	0	2	56	4	0	1	10.9	3	44	3	4.9	1	8	4	31	1	59	1	7	3	10	0	6.8		
41	3	8.2	1	2	3	1.9	3	1	1	50	1	2.8	2	0	2	37	0	3.7	2	8	3	25	1.9	7	2	7	4	12	2.7	6	11.2	6	4	50	3.9	0		
42	10.4	1	0	45	28.9	6	11.4	0	1	32	29.7	5	12.3	9.9	2	19	0.6	5	3	7	3	6	5	4	14.2	11.6	3	53	3	4	2	5	4	39	1	3		
43	5	1	0	27	5	3	4	8.9	1	13	3	3	4	8	2	0	2	2	13.3	7	2	47	0	2	3	5	3	33	19	1	15.2	4	4	19	27	0		
44	5	0	0	8	1	1	5	9	0	55	28.9	0	4	7	1	41	29.8	2.9	4	10.6	2	27	0.6	3.9	3	4	3	13	4	48	3	3	3	39	3	58		
45	6	7.9	29	50	27.6	0.8	6	8	0	36	5	17	5	6	1	22	3	6	4	5	2	7	2	6	4	3	2	53	0	5	3	12.3	3	38	1.8	3		
46	6	9	29	31	2	5	6	7	0	17	1	4	5	9.6	1	2	28.9	3	5	4	147	29.7	3	14	4	11.2	2	32	0.6	2	4	2	3	17	4			
47	10.7	8	29	12	26.8	1	11.7	6	29	57	27.7	1	12.6	5	0	42	5	0	5	3	127	3	0	5	1	2	11	2	3.9	15.4	1	2	33	0.9	4.8			
48	8	7	28	53	4	29.8	7	8	6	29	37	2	0.8	7	4	0	21	0	1.7	13.6	10.2	1	6	28	0	2.6	5	1	15.0	29	7	5	0	234	5	5		
49	8	7.7	28	33	0	5	8	5	29	17	26.7	4	8	3	0	1	27.6	3	7	2	0	45	4	3	6	0	1	28	2	1	9	11.9	2	11	0			
50	9	6	28	13	25.5	1	9	4	28	56	3	0	8	9.2	2	29	40	1	0.9	7	1	0	23	27.9	1.9	14.6	10.9	1	6	28.7	2.8	6	7	14	2.9	3.8		
51	11.0	5	27	52	0	28.8	12.0	3	28	35	25.5	29.7	9	1	29	18	26.6	5	8	0	0	1	4	6	7	8	0	43	2	4	15.7	6	1.0	0	4			
52	1	4	27	31	24.5	4	1	8.2	28	14	3	3	13.0	1	28	56	1	1	0	9.9	29	38	26.9	2	8	7	0	20	27.7	0	8	5	1	228	4			
53	2	7.3	27	10	0	0	2	1	27	52	24.8	28.9	1	0	28	34	25.5	29.7	14	0	8	29	15	3	0	7	9	6	29	57	1	16	8	11.4	0	78	17.8	2.6
54	3	3	26	48	23.4	27.5	3	0	27	29	2	4	2	8.9	28	11	24.9	3	1	7	28	51	25.7	3	15.0	10	8	29	32	26.5	1	9	3	3	17	2		
55	5	2	26	25	22.8	26.9	4	0	27	6	23.6	27.9	3	8	8	27	47	3	28.8	2	6	28	27	1	29.7	1	4	1	8	28	0	6	16	1	28	0	16	
56	6	1	26	3	2	4	5	7.9	26	43	0	4	4	7	27	23	23.7	3	3	5	28	3	28.5	2	2	1	28	42	2	1	1	0	29	22	0			

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th II.

H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.						
SID. T. 8 57 52 } 22°				9 1 53 } 13°				9 5 53 } 14°				9 9 52 } 15°				9 13 51 } 16°				9 17 49 } 17°						
ARC 134° 27.9 } 12°				135° 28.1 }				136° 28.2 }				137° 28.0 }				138° 27.7 }				139° 27.2 }						
11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3		
Lat.	♈	♉	♊	♋	♈	♉	♊	♋	♍	♈	♉	♊	♋	♍	♈	♉	♊	♋	♍	♈	♉	♊	♋	♍		
22	14.1	14.1	10.40	9.9	10.3	15.1	15.1	11.33	10.8	11.2	16.2	16.0	12.27	11.7	12.1	17.2	17.0	13.20	12.6	13.1	18.2	17.9	14.13	13.5	14.0	
23	2	0	10.23	6	1	2	0	11.16	5	0	2	15.9	12.9	4	0	2	16.9	13.3	3	12.9	2	9	13.55	2	13.8	
24	2	0	10.6	3	9.9	2	14.9	10.59	2	10.9	2	9	11.52	1	11.8	2	8	12.45	0	8	3	8	13.37	12.9	7	
25	3	13.9	9.49	0	8	3	8	10.42	9.9	7	3	8	11.34	10.8	7	3	8	12.27	11.7	6	3	7	13.19	6	5	
26	3	8	9.32	8.7	6	3	7	10.25	6	6	3	7	11.17	5	5	3	7	12.9	4	4	3	17.6	13.1	3	4	
27	14.4	7	9.15	4	4	15.4	7	10.7	3	4	16.4	15.6	10.59	2	3	17.4	16.6	11.51	1	3	18.4	5	12.42	0	2	
28	4	7	8.58	1	3	4	14.6	9.50	0	2	4	5	10.41	9.9	1	4	5	11.33	10.8	1	4	4	12.24	11.6	0	
29	5	13.6	8.40	7.8	1	5	5	9.32	8.7	0	5	4	10.23	6	0	4	4	11.14	4	11.9	4	3	12.5	3	12.8	
30	5	5	8.23	5	8.9	5	4	9.14	4	9.8	5	3	10.5	2	10.8	5	3	10.56	1	7	5	17.2	11.47	0	7	
31	14.6	4	8.5	2	7	15.6	3	8.56	0	7	5	15.3	9.47	8.9	6	5	16.2	10.37	9.8	5	5	11.11	28	10.7	5	
32	6	3	7.48	6.8	5	6	14.3	8.38	7.7	5	16.6	2	9.28	6	4	17.6	1	10.19	5	3	18.6	0	11.8	3	3	
33	7	13.3	7.30	5	3	7	2	8.20	4	3	6	1	9.10	3	2	6	0	10.0	1	1	6	16.9	10.49	0	1	
34	7	2	7.12	2	1	7	1	8.1	0	1	7	0	8.51	7.9	0	6	15.9	9.40	8.8	10.9	6	8	10.30	9.7	11.9	
35	14.8	1	6.53	5.8	7.9	15.8	0	7.43	6.7	8.9	7	14.9	8.32	5	9.8	7	8	9.21	4	7	7	7	10.10	3	7	
36	8	0	6.35	5	7	8	13.9	7.24	3	7	16.8	8	8.13	2	6	7	7	9.1	0	5	7	6	9.50	8.9	5	
37	9	12.9	6.16	1	5	9	8	7.5	0	5	8	7	7.53	6.8	4	17.8	6	8.42	7.7	3	18.8	5	9.30	5	2	
38	0	8	5.57	4.7	3	9	7	6.46	5.7	2	9	6	7.34	4	2	8	5	8.22	3	1	8	16.4	9.9	1	0	
39	15.0	7	5.38	3	1	16.0	6	6.26	3	0	9	5	7.14	0	8.9	9	15.4	8	1	6.9	9.9	8	2	8.48	7.7	10.8
40	1	7	5.19	0	6.8	0	5	6	6	4.9	7.8	17.0	14.4	6.53	5.6	7	9	3	7.40	6	6	9	1	8.27	3	5
41	1	12.6	4.59	3.5	6	1	13.4	5.46	5	5	0	3	6.33	2	4	18.0	1	7.20	2	4	9	0	8.6	6.9	3	
42	2	5	4.39	1	3	1	3	5.26	1	2	0	2	6.12	4.8	2	0	0	6.59	5.7	1	19.0	15.9	7.45	5	0	
43	15.2	4	4.19	2.7	0	2	2	5	6	3.7	0	1	1	5.51	4	7.9	1	14.9	6.37	3	8.8	0	8	7.23	1	9.8
44	3	3	3.59	3	5.8	16.2	1	4.45	2	6.7	17.1	0	5.30	3.9	6	1	8	6.16	4.8	5	0	7	7	1	5.6	5
45	3	12.3	3.38	1.8	5	3	0	4.23	2.8	4	2	13.9	5.9	5	3	1	7	5.54	3	2	1	6	6.38	1	2	0
46	4	2	3.17	4	2	3	12.9	4	2	3	1	2	8	4.47	0	0	18.2	6	5.31	3.9	7.9	1	15.5	6.15	4.7	8.9
47	15.4	1	2.55	0.9	4.8	4	9	3.39	1.8	5.8	3	7	4.24	2.5	6.7	2	5	5.8	4	6	19.2	4	5.52	2	6	
48	5	0	2.34	5	5	16.4	8	3.18	3	4	17.3	6	4	1	1	4	3	14.4	4.45	0	3	2	2	5.28	3.8	2
49	5	11.9	2.11	0	2	5	7	2.55	0.8	1	4	5	3.38	1.6	0	3	3	4.21	2.5	6.9	3	1	5.4	3	7.9	2
50	6	7	1.49	29.5	3.8	5	5	5	2.32	3	4.7	4	13.3	3.14	1	5.6	4	1	3.57	1.9	6	3	14.9	4.39	2.7	5
51	15.7	6	1.26	0	4	6	12.4	2	8	29.5	3	5	2	2.50	0.6	3	18.4	0	3.32	3	2	4	8	4.14	1	1
52	8	5	1.228.4	0	16.7	3	1.44	2	7	9	17.5	1	2.25	0	4.9	5	13.9	3	7	0.7	5.8	19.4	7	3.48	1.5	6.7
53	8	11.4	0.3827.8	2.6	7	2	1.19	28.6	5	6	0	2	0.29.4	4	4	5	8	2.41	1	4	5	6	3.22	0.9	3	4
54	9	3	0.132	2	1	8	1	0.54	0	0	7	12.9	1.34	28.8	3.9	6	6	7	2.15	29.5	4.9	5	14.4	2.55	3	5.8
55	16.0	1	2.94826.6	1.6	9	11.9	0.28	27.4	2.5	8	7	1	8	1	4	7	5	1.48	28.9	4	6	2	2.227	29.7	3	5
56	1	0	2922	0	0	17.0	7	0	2.26.7	0	9	6	0.41	27.4	2.9	7	3	1.20	2	3.8	6	0	1.59	0	4.7	5

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.												H. M. S.												H. M. S.												H. M. S.											
SID. T. 9 21 46						9 25 43						9 29 39						9 33 34						9 37 29						9 41 23						9 41 23											
ARC 140° 26'.6						18°						19°						20°						21°						22°						23°											
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3						
Lat.	♈	♉	♊	♋	♌	♈	♉	♊	♋	♌	♍	♈	♉	♊	♋	♌	♍	♈	♉	♊	♋	♌	♍	♈	♉	♊	♋	♌	♍	♈	♉	♊	♋	♌	♍	♈	♉	♊	♋	♌	♍						
22	20.2	19.8	15.59	15.2	15.9	21.2	20.8	16.51	16.1	16.8	22.2	21.7	17.43	17.0	17.7	23	22.7	18.35	17.9	18.7	24	23.6	19.27	18.8	19.6	25	24.5	20.16	19.8	20.6	26	25.4	20.16	19.8	20.6	27	26.3	20.16	19.8	20.6							
23	2	7	15.40	14.9	7	2	7	16.32	15.8	6	2	6.17	24	16.7	6	2	6.18	16	6	5	2	5.19	7	5	4	2	4.19	5	3	4	2	3.19	3	0	2	2.19	3	0	2								
24	3	6	15.21	6	5	2	6	16.13	5	5	3	5.17	5	4	4	3	4.17	56	3	3	2	4.18	45	2	3	2	3.19	39	0	2	2	2.19	3	0	2												
25	3	5.5	15.3	3	3	4	3	5.15	54	2	3	4.16	46	1	2	3	3.17	37	0	2	2	2.15	28	17.9	1	2	2	2.19	18	15.7	0	2	2.19	18	15.7	0											
26	3	4.4	14.44	0	2	3	20.4	15.35	14.9	1	3	21.3	16.26	15.8	1	3	22.2	17.17	16.7	0	3	1.18	7	5.18	9	3	0.18	58	4	19	6	0	2	1.18	58	4	19	6									
27	3	19.3	14.25	13.7	0	21.3	21.5	16	6	0	22.3	21.6	6	5.16	9	23.3	1	16.57	4	17.8	24.3	0	17.47	2	8	25.3	23.9	18.37	1	7	25	3	23.9	18.37	1	7											
28	20.4	21.4	6	4	14.9	4	1	14.56	3	15.8	3	1.15	47	2	7	3	0.16	37	0	7	3	22.9	17.27	16.9	6	3	5.18	17	17.8	5	3	5.18	17	17.8	5												
29	4	1.1	13.46	1	7	4	0	14.37	0	6	4	20.9	15.27	14.8	6	4	21.8	16.17	15.7	5	3	8.17	6	6	4	3	7.17	56	4	4	3	7.17	56	4	4												
30	4	0.1	13.27	12.8	5	4	19.9	14.17	13.6	4	4	8.15	7	5	4	4	7.15	56	4	3	3	6.16	46	2	2	3	5.17	35	1	2	3	5.17	35	1	2												
31	5	18.9	13.7	4	3	4	8	13.57	3	3	4	7.14	46	2	2	4	6.15	36	0	1	4	5.16	25	15.9	1	3	2.23	4	17.14	16.8	0	3	2.23	4	17.14	16.8	0										
32	5	8	12.47	1	1	21.5	7	13.37	0	1	22.4	6.14	26	13.8	0	23.4	5.15	15	14.7	16.9	24.4	22.4	16	4	6	17.9	25.3	3	16.52	4	18.8	6	0	2	16.52	4	18.8	6									
33	20.5	7	12.27	11.7	13.9	5	6	13.17	12.6	14.9	5	5.14	5	5.15	8	4	21.3	14.54	3	7	4	2.15	42	2	7	4	1.16	31	1	6	4	1.16	31	1	6												
34	6	6.12	7	4	7	5	5	12.56	3	7	5	20.4	13.44	1	6	5	2.14	33	0	5	4	1.15	21	14.8	5	4	0.16	9	15.7	4	4	0.16	9	15.7	4												
35	6	5.11	47	0	5	6	19.3	12.35	11.9	5	5	2.13	23	12.7	4	5	1.14	11	13.6	3	4	0.14	59	4	3	4	22.8	15.47	3	2	4	22.8	15.47	3	2												
36	6	18.3	11.26	10.6	3	6	2.12	14	5	3	5	1.13	2	4	2	5	20.9	13.50	2	1	5	21.8	14.37	1	1	4	7.15	25	14.9	0	4	7.15	25	14.9	0												
37	20.7	2	11.5	3	1	21.6	1	11.53	1	1	22.6	0	12.40	0	0	23.5	8.13	28	12.8	15.9	24.5	7.14	15	13.7	16.9	25.4	5.15	2	5.17	8	25	5.15	2	5.17	8												
38	7	1.10	44	9.9	12.9	7	0	11.31	10.7	13.8	6	19.9	12	19	11.6	14.8	6	7.13	5	4	7	5	6.13	52	3	7	4	4.14	39	1	6	4	4.14	39	1	6											
39	7	0.10	23	5	7	7	18.8	11.10	3	6	6	8.11	56	2	5	6	5.12	43	0	5	5	5.13	29	12.8	4	5	2.14	16	13.7	4	4	2.14	16	13.7	4												
40	8	17.8	10	1	1	4	7	7.10	48	9.9	4	7	6.11	34	10.7	3	6	20.4	12.20	11.6	2	5	21.3	13	6	4	2	5	1.13	52	3	1	5	1.13	52	3	1										
41	20.8	7	9.39	8.6	2	8	6.10	25	5	1	7	5.11	11	3	0	23.6	2.11	57	1	0	6	2.12	43	0	159	5	21.9	13.28	12.8	16.9	5	21.9	13.28	12.8	16.9	5											
42	9	6	9.17	2	11.9	21.8	4	10	2	0	12.8	22.7	19.4	10.48	9.9	13.8	7	1.11	34	10.7	14.7	24.6	0	12.19	11.5	7	25	8	13	4	9	8	13	4	9	8	13	4	9								
43	9	5	8.54	7.8	6	8	18.3	9.39	8.6	6	8	2.10	24	4	5	7	19.9	11.10	2	5	6	20.9	11.55	1	4	5	6.12	39	11.9	3	5	6.12	39	11.9	3												
44	9	17.4	8.31	3	3	9	2	9.16	1	3	8	1.10	1	8.9	2	7	8.10	45	9.8	2	6	7	11.30	10	1	6	6	7.12	14	4	6	7.12	14	4	6												
45	21.0	3	8.8	6.8	0	9	1	8.52	7.6	0	8	18.9	9.36	4	12.9	23.8	7	10.21	3	13.9	7	5.11	5	11.48	6	21.4	11.48	10.9	15.7	7	5.11	5	11.48	6	21.4	11.48	10.9	15.7									
46	0	1	7.44	3	10.7	9	17.9	8.28	1	11.7	22.9	8	9.12	7.9	6	8	6	9.55	8.8	6	7	4	10.39	9.6	5	6	3	11.22	4	4	3	11.22	4	4	3												
47	0	0	7.20	5.8	4	22.0	8	8	3	6.6	4	9	6	8.47	4	3	8	19.4	9.30	2	2	24.7	2	10.13	1	2	22	6	11.56	9.9	1	2	22	6	11.56	9.9	1										
48	116.8	6.55	3	1	0	6	7.38	1	0	9	4	8.21	6.9	0	0	8	2	9	4	7.7	12.9	7	0	9.46	8.9	13.9	7	20	10.28	3	14.8	7	20	10.28	3	14.8											
49	21.1	7	6.30	4.8	9.7	1	5	7.12	5.6	10.7	9	3	7.55	4	11.7	23.9	1	8.37	1	6	8	19.8	9.19	0	6	7	7.10	2	8.8	6	7	7.10	2	8.8	6												
50	1	5	6.4	3	4	117.3	6.46	1	4	23.0	1	7.28	5.8	3	9	18.9	8.10	6.6	3	8	7	8.32	7.4	2	7	3	9.33	2	3	7	3	9.33	2	3													
51	2	4	5.37	3.7	0	1	1	6.19	4.5	0	0	17.9	7	1	2	10.9	9	7	7.42	0	11.9	8	6	8.24	6.8	12.8	7	3	9.5	7	6.11	5	3														
52	216.3	5.10	1	8.6	22.2	0	5.52	3.9	9.6	0	8	6.33	4.6	5	9	6	7.14	5.6	0	9.24	8	4	7.93	2	6.75	3	8.70	0	9	8.70	0	9															
53	21.3	2	4.43	2.5	1	216.9	5.24	3	1	1	7	6	4	0	124.0	4	6.45	4.8	0	9	2	7.25	3	0	8.16	8	3	6.11	2	8.16	8	3	6.11	2													
54	3	0	4.15	1.9	7.7	2	7	4.55	2.6	8.6	23.1	5	5.35	3.4	9.6	0	2	6.15	11.0	5	9	3	6.93	4.21	7	6	7	7.34	5.6	4	6	7	7.34	5.6	4												
55	4	15.8	3.47	2	2	3	5	4.26	1.9	1	1	3	5	5	2.7	1	0	0	0	5.44	3.4	0	18.8	6.26	2	0	9	7	2	4.21	1.9	0	18.8	6.26	2	0											
56	5	6	3.17																																												

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.													
SID. T. 9 41 23 } 23°					9 45 16 } 24°					9 49 8 } 25°					9 53 0 } 26°					9 56 52 } 27°													
ARC 145° 20'.6 }					146° 19'.0 }					147° 17'.1 }					148° 15'.1 }					149° 12'.9 }													
II.	11	12	1	2	3	II.	11	12	1	2	3	II.	11	12	1	2	3	II.	11	12	1	2	3	II.	11	12	1	2	3				
Lat.	♈	♉	♊	♋	♌	♈	♉	♊	♋	♌	♍	♎	♏	♑	♉	♊	♋	♌	♍	♎	♏	♑	♉	♊	♋	♌	♍	♎					
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					
22	25.2	24.5	20.19	19.6	20.5	26.2	25.5	21.11	20.5	21.4	27.2	26.4	22	22.14	22.4	28.2	27.3	22.53	22.3	23.3	29.2	28.2	23.44	23.2	24.3	0.2	29.1	24.35	24.0	25.2			
23	2	4	19.59	3	4	2	3	20.50	2	3	2	2.21	41	1	2	2	2.22	32	0	2	2	1	23	23	22.9	2	2	0.24	13	23.7	1		
24	2	3	19.39	0	2	2	2	2.20	30	19.9	1	2	1.21	20	20.8	1	2	0.22	11	21.7	0	2	2.27	9	23	2	5	0	2.28	8	23.52	4	24.9
25	2	2	19.18	18.7	0	2	1	20	9	6	0	2	0.21	0	5.21.9	2	2.26	9	21.50	4	22.8	2	8.22	40	22.38	2	7.23	30	1	8			
26	3	0	18.58	4	19.9	2	2.24	9	19.48	3	20.8	2	2.25	9	20.38	2	8	2	8.21	29	0	7	2	7.22	19	21.9	7	2	5.23	9	22.8	6	
27	25.3	23.9	18.37	1	7	26.3	8	19.28	0	6	27.2	7	20.17	19.8	6	28.2	6	21	7	20.7	5	29.2	5	21.57	6	5	0.2	4.22	47	4	5		
28	3	8	18.17	17.8	5	3	7	19	7	18.6	5	2	6	19.56	5	4	2	5	20.46	4	4	2	2.27	4	21.35	2	4	2.28	3	22.25	1	3	
29	3	7	17.56	4	4	3	5	18.46	3	3	2	4	19.35	2	2	2	2.26	3	20.24	0	2	2	2.21	13	20.9	2	2	1.22	2	21.8	1		
30	3	5	17.35	1	2	3	24.4	18.24	0	1	3	25.3	19.13	18.8	1	2	2	2.20	2	19.7	0	2	2	1.20	51	5	0	2	0.21	40	423.9		
31	3	23.4	17.14	16.8	0	3	3	18	3	17.6	19.9	3	2	18.51	5	20.9	2	1.19	40	3	21.8	2	2.26	9	20.29	2	22.8	2	27.8	21.17	1	8	
32	25.3	3	16.52	4	18.8	26.3	1	17.41	3	8	27.3	0	18.29	1	7	28.2	25.9	19.18	0	6	29.2	8	20	6	19.8	6	0.2	6.20	54	20.7	6		
33	4	1	16.31	1	6	3	0	17.19	16.9	6	3	24.9	18	7	17.8	5	2	8	18.55	18.6	5	2	6	19.43	5	4	2	5.20	31	3	4		
34	4	0	16	9	15.7	4	3	23.9	16.57	5	4	3	7	17.45	4	3	2	6	18.32	2	3	2	5	19.20	1	2	2	3.20	8	0	2		
35	4	22.8	15.47	3	2	4	7	16.35	1	2	3	6	17.22	0	1	3	4	18	9	17.8	1	2	2.26	3	18.57	18.7	0	2	2	19.44	19.6	0	
36	4	7	15.25	14.9	0	4	6	16.12	15.7	0	3	4	16.59	16.6	19.9	3	2.25	3	17.46	4	20.9	2	1	18.33	3	21.8	2	0	19.20	22.8			
37	25.4	5	15	2	5.17.8	26.4	4	15.49	3	18.8	27.3	3	16.36	2	7	28.3	1	17.22	0	7	29.2	0	18	9	17.9	6	0.2	26.8	18.56	18.8	6		
38	4	4	14.39	1	6	4	23.2	15.26	14.9	5	3	1	16.12	15.8	5	3	0	16.58	16.6	4	2	2.25	9	17.45	5	4	2	6	18.31	3	4		
39	5	2	14.16	13.7	4	4	1	15	2	5	3	3	23.9	15.48	4	3	3	24.8	16.34	2	2	2	7	17.20	1	2	2	5.18	6	17.9	1		
40	5	1	13.52	3	1	4	0	14.38	1	1	4	8	15.24	14.9	0	3	6	16	9	15.8	0	2	5	16.55	16.7	0	2	3	17.40	5	21.9		
41	5	21.9	13.28	12.8	16.9	4	22.9	14.14	13.7	17.8	4	6	14.59	5	18.8	3	4	15.44	3	19.7	2	3	16.29	3	20.7	2	1	17.14	0	6			
42	25.5	8	13	4	4	6	26.5	7	13.49	2	6	27.4	4	14.34	0	5	28.3	2	15.19	14.9	5	29.2	2	16	3	15.8	4	0.2	25.9	16.48	16.5	4	
43	5	6	12.39	11.9	3	5	5	13.24	12.7	3	4	23.2	14	8	13.6	2	3	1	14.53	4	2	2	0	15.37	3	1	2	7	16.21	0	1		
44	6	5	12.14	4	0	5	3	12.58	3	0	4	1	13.42	1	17.9	3	23.9	14	26	13.9	18.9	2	24.8	15	10	14.8	19.9	2	6	15.54	15.5	20.8	
45	6	21.4	11.48	10.9	15.7	5	2	12.32	11.8	16.7	4	0	13.16	12.6	6	3	8	14	0	4	6	2	6	14.43	3	6	2	4	15.27	0	6		
46	6	3	11.22	4	4	5	0	12	6	3	4	22.8	12.49	1	3	3	6	13.32	12.9	3	2	4	14	15	13.7	3	2	2	21.45	14.5	3		
47	25.6	1	10.56	9.9	1	26.5	21.9	11.39	10.7	1	27.4	6	12.22	11.5	0	28.3	4	13	4	3	0	29.3	2	13.47	1	0	0.2	0	14.30	13.9	0		
48	7	20.9	10.29	3	14.8	6	7	11.12	2	15.8	4	5	11.54	0	16.7	4	2	12.36	11.8	17.7	3	0	13.18	12.5	18.7	2	24.8	14	0	3	19.7		
49	7	7	10	2	8.8	5	6	5	10.44	9.6	5	5	3	11.25	10.4	4	4	0	12	7	2	4	3	23.8	12.49	0	4	2	6	13.30	12.8	4	
50	7	5	9.33	2	2	6	3	10.15	0	1	5	1	10.56	9.8	1	4	22.8	11.38	10.6	0	3	6	12.19	11.4	0	2	4	13	0	2	0		
51	7	3	9	5	7.6	13.8	6	1	9.46	8.4	14.7	5	21.9	10.27	2	15.7	4	6	11	7	0	16.6	3	4	11.48	10.8	17.6	2	2	12.28	11.5	18.6	
52	25.8	1	8.35	0	4	26.6	20.9	9	16	7.7	3	27.5	7	9.56	8.5	3	28.4	4	10.36	9.3	2	29.3	2	11.16	1	2	0.2	0	11.56	10.8	2		
53	8	19.9	8	5	6.3	12.9	7	7	8.45	1	13.9	5	5	9.25	7.8	14.8	4	2	10	5	8.6	15.8	3	0	10.44	9.4	16.8	2	23.8	11.23	1	17.7	
54	8	7	7.34	5.6	4	7	5	8.13	6.4	4	5	3	8.53	1	3	4	0	9.32	7.9	3	3	22.8	10.11	8.7	3	2	5	10.50	9.4	2			
55	8	5	7	2	4.9	11.9	7	3	7.41	5.7	12.9	6	0	8.20	6.4	13.8	4	21.7	8.59	2	14.8	3	5	9.37	7.9	15.8	2	2	21.015	8.7	16.7		
56	9	2	6.30	2	3	7	1	7	8	0	3	6	20.8	7.46	5.6	2	4	5	8.24	6.4	2	3	3	9	2	1	2	2	0	9.40	7.9	1	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

29

H. M. S.										H. M. S.										H. M. S.										H. M. S.									
SID. T. 10 4 33					10 8 22					10 12 11					10 16 0					10 19 47					10 23 35					H. M. S.									
ARC 151° 8'.1					152° 5'.5					153° 2'.8					153° 59'.9					154° 56'.8					155° 53'.7					H. M. S.									
Lat.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3				
22°	1.1	0.0	25 25	24.9	26.2	2.1	1.0	26 16	25.8	27.1	3.1	1.9	27 6	26.6	28.1	4.1	2.8	27 56	27.5	29.0	5.1	3.7	28 46	28.4	29.9	6.0	4 6	29 36	29.2	0 9	11	12	1	2	3				
23	1	29.9	25 4	6	0	1	0.8	25 54	5	0	1	7 26	44	3	27.9	1	6 27	34	2	28.8	1	5 28	24	1	8	0	4 29	14	28.9	7	11	12	1	2	3				
24	2	7 24	42	3	25.9	1	6 25	32	1	26.8	1	5 26	22	0	8	1	5 27	12	26.9	7	0	3 28	1	27.7	6	0	2 28	51	6	6	11	12	1	2	3				
25	1	6 24	20	0	7	1	5 25	10	24.8	7	1	4 26	0	25.7	6	1	3 26	49	5	5	0	2 27	38	4	5	0	1 28	28	3	4	11	12	1	2	3				
26	1	4 23	58	23.6	6	1	3 24	48	5	5	3.1	2 25	37	3	4	4.0	1 26	26	2	3	5.0	0 27	15	1 29.3	0	3.9	28	4	27.9	3	11	12	1	2	3				
27	1.1	29.3	23 36	3	4	2.1	2 24	25	2	4	1	1 25	15	0	27.3	9	1 9 26	4	25.9	2	0	2 8	26	52	26.8	1	0	7 27	41	6	1	11	12	1	2	3			
28	1	1 23	14	0	2	1	0 24	3	23.8	2	0	0 9 24	52	24.7	1	0	8 25	40	5	0	0	6 26	29	4	0	5.9	5 27	17	3 29.9	11	12	1	2	3					
29	1	0 22	51	22.6	1	1	29.9	23 40	5	0	0	0	7 24	29	3	0	0	6 25	17	2	27.9	0	5 26	5	1 28.8	9	3 26	53	26.9	8	11	12	1	2	3				
30	1	28.8	22 28	3	24.9	1	7 23	17	1	25.8	3.0	6 24	5	0	26.8	4.0	4 24	53	24.8	7	4.9	3 25	41	25.7	6	9	2 26	29	6	6	11	12	1	2	3				
31	1	7 22	5 21.9	7	1	5 22	54	22.8	7	0	4 23	42	23.6	6	0	3 24	29	5	5	9	1 25	17	3	5	9	0 26	5	2	4	11	12	1	2	3					
32	1.1	5 21	42	6	5	2.1	4 22	30	4	5	0	2 23	18	3	4	0	1 24	5	1	3	9	1 9 24	53	0	3	9	2 5	25	40	25.8	2	11	12	1	2	3			
33	1	4 21	19	2	3	0	2 22	6	0	3	0	1 22	54	22.9	2	3.9	0 9 23	41	23.8	1	9	8 24	28	24.6	1	5.8	6 25	15	5	0	11	12	1	2	3				
34	1	2 20	55	20.8	1	0	0 21	42	21.7	1	3.0	29.9	22 29	5	0	9	7 23	16	4	26.9	9	6 24	3	2	27.9	8	4 24	50	1 28.9	11	12	1	2	3					
35	1	0 20	31	4	23.9	0	28.9	21 18	3	24.9	0	7 22	5	1	25.8	9	5 22	51	0	7	4.9	4 23	38	23.8	7	8	2 24	24	24.7	7	11	12	1	2	3				
36	1	27.8	20 6	0	7	0	7 20	53	20.9	7	0	5 21	40	21.7	6	9	3 22	26	22.6	5	8	2 23	12	4	5	8	0 23	58	3	5	11	12	1	2	3				
37	1.1	7 19	42 19.6	5	2.0	6 20	28	5	5	0	4 21	14	3	4	9	1 22	0	2	3	8	0 22	46	0	3	8	1 5 23	32	23.9	3	11	12	1	2	3					
38	1	5 19	17	2	3	0	4 20	3	0	3	2.9	2 20	48	20.9	2	3.9	0 9 21	34	21.7	1	8	0 8 22	20	22.6	1	5.7	6 23	5	4	1	11	12	1	2	3				
39	1	3 18	51 18.7	1	0	2 19	37	19.6	0	9	0 20	22	4	0	9 29.8	21	8	3 25.9	8	6 21	53	1 26.9	7	4 22	38	22.9	27.9	11	12	1	2	3							
40	1	1 18	26	3	22.9	0	0 19	11	1	23.8	9 28.8	19 56	0	24.8	8	6 20	41	20.8	7	4.8	4 21	26	21.6	7	7	2 22	11	5	6	11	12	1	2	3					
41	1	1 26.9	17 59	17.8	6	0	27.8	18 44	18.7	6	9	6 19	29	19.6	5	8	4 20	13	3	5	7	2 20	58	2	4	7	0 21	42	0	4	11	12	1	2	3				
42	1.1	8 17	33	3	3	2.0	6 18	17	2	3	9	4 19	1	1	3	8	2 19	46	19.8	2	7	0 20	30	20.7	2	6	0 8 21	14	21.5	2	11	12	1	2	3				
43	1	6 17	5 16 8	1	0	4 17	50	17.7	0	2.9	2 18	34	18.6	0	3.8	0 19	17	3	0	7 29.8	20	1	2	25.9	5.6	6 20	45	0 26.9	11	12	1	2	3						
44	1	4 16	38	3	21.8	0	2 17	22	1	22.7	9	0 18	5	1	23.7	8 28.8	18 48	18.8	24.7	7	6 19	32	19.6	7	6	4 20	15	20.5	6	11	12	1	2	3					
45	1	2 16	10 15.8	5	0	0 16	53	16.6	5	9 27.8	17 36	17.5	5	8	6 18	19	3	5	4.7	4 19	2	1	4	6	2 19	45	19.9	3	11	12	1	2	3						
46	1	0 15	41	3	2	0	26.8	16 24	1	2	9	6 17	7	0	2	8	4 17	49	17.7	2	6	2 18	32	18.5	1	5 29.9	19 14	3	1	11	12	1	2	3					
47	1.1	25.7	15 12	14.7	20.9	2.0	6 15	54	15.5	21.9	8	3 16	37	16.4	22.9	7	2 17	19	1	23.9	6	0 18	1	0 24.8	5	7 18	43	18.5	25.8	11	12	1	2	3					
48	1	5 14	42	1	6	0	4 15	23	14.9	6	2.8	1 16	6 15.8	6	3.7	0 16	48	16.6	6	6 28	7 17	29 17.4	5	5.5	4 18	11	2	5	11	12	1	2	3						
49	1	3 14	12 13.6	3	0	2 14	52	4	2	8 26.8	15 34	2	3	7 27.7	16 16	0	3	4.6	5 16	57	16.8	2	5	1 17	38	17.6	1	11	12	1	2	3							
50	1	1 13	41	0 19.9	0	25.9	14 21	13.8	20.9	8	6 15	2 14	6 21 9	7	4 15	43	15.4	22.9	6	2 16	24	2	23.8	5 28.9	17	4	0 24.8	11	12	1	2	3							
51	0 24.9	13 9 12.3	5	1.9	7 13	49	2	5	8	4 14	29	13.9	5	7	2 15	10	14.7	5	5 27.9	15 50	15.5	4	4	6 16	30	16.3	4	11	12	1	2	3							
52	1.0	7 12	36 11.6	1	9	5 13	16 12.5	1	2.8	2 13	56	2	1	3.6	0 14	35	0	1	5	7 15	15 14 8	0	5.4	4 15	55	15.6	0	11	12	1	2	3							
53	0	4 12	3 10.9	18.7	9	3 12	42 11.8	19.7	8	0 13	21	12.5	20.7	6 26.7	14	0 13.3	21 7	4.5	4 14	40	1	22.6	4	1 15	19	14.9	23.6	11	12	1	2	3							
54	0	2 11	28	2	2	9	0 12	8	0	2	8 25.7	12 46	11.8	2	6	4 13	25	12.5	2	5	1 14	3 13	3	1	3 27	8 14	42	1	1	11	12	1	2	3					
55	0	2 3.9	10 54	9.5	17.7	9 24.7	11 32	10.2	18.7	8	4 12	10	0 19.7	6	1 12	48	11.7	20.7	5 26	8 13	26 12.5	21.6	3	5 14	4 13.3	22.6	0	11	12	1	2	3							
56	0	6 10	18	8.7	1	8	4 10	55	9.4	1	7	1 11	33 10.2	1	5 25.8	12 10	10.9	1	4	5 12	47	11.6	0	3	2 13	25	12.5	0	11	12	1	2	3						

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S. SID. T. 10 23 35 } $\pi\pi$ ARC 155° 53' 7" } 4°					H. M. S. 10 27 22 } $\pi\pi$ 5° 156° 50' 4" }					H. M. S. 10 31 8 } $\pi\pi$ 6° 157° 47' 0" }					H. M. S. 10 34 54 } $\pi\pi$ 7° 158° 43' 4" }					H. M. S. 10 38 39 } $\pi\pi$ 8° 159° 39' 8" }					H. M. S. 10 42 24 } $\pi\pi$ 9° 160° 36' 0" }					
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3
Lat.	$\Delta$	$\pi$	$\pi$	$\pi$	$\pi$	$\Delta$	$\pi$	$\pi$	$\pi$	$\pi$	$\Delta$	$\pi$	$\pi$	$\pi$	$\pi$	$\Delta$	$\pi$	$\pi$	$\pi$	$\pi$	$\Delta$	$\pi$	$\pi$	$\pi$	$\pi$	$\Delta$	$\pi$	$\pi$	$\pi$	$\pi$
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
22	6.0	4.6	29 36	29.2	0.9	7.0	5.5	0 26	0.1	1.8	8.0	6.3	1 15	1.0	2.7	9.0	7.2	2 5	1.8	3.7	9.9	8.1	2 55	2.7	4.6	10.9	9.0	3 44	3.6	5.6
23	0	4 29 14	28.9	7	0	3 0 3	29.8	7	0	2 0 52	0.6	6	8.9	1 1 42	5	5	9 7.9	2 31	4	5	9 8.8	3 20	2	4	8	6 2 56	2.9	3		
24	0	2 28 51	6	6	0	1 29 40	5	5	7.9	0 0 29	3	5	9 6.9	1 18	2	4	9 7 2 7	1	3	8 8 6	2 56	2.9	3	8	4 2 32	6	2	2		
25	0	1 28 28	3	4	6.9	4.9 29 17	1	4	9 5.8 0 6	0	3	9 7 0 54	0.9	2	8 5 1 43	1.7	2	8 4 2 32	6	2	8	4 2 32	6	2	2	0	8 2 2 8	3	0	
26	0	3.9 28 4	27.9	3	9	7 28 53	28.8	2	9 6 29 42	29.7	2	9 5 0 30	5	1	8 3 1 19	4	0	8 2 2 2 8	3	0	8	2 2 2 8	3	0	8	2 2 2 8	3	0		
27	0	7 27 41	6	1	9	6 28 29	5	0	9 4 29 18	3	0	8 3 0 6	2	2.9	9.8 2 0 55	1	3.9	10.7 0 1 43	1.9	4.9	8	0 0 30	0.7	7	7 7.8	1 18	6	7		
28	5.9	5 27 17	3 29.9	9	4 28 6	1	0.9	9 3 28 54	0	1.8	8.8 1 29 42	29.9	8	8 0 0 30	0.7	7	7 7.8 1 18	6	7	5 6.8 2 9 10	29.8	3.9	5	6 2 8 43	4	7				
29	9	3 26 53	26.9	8	9 2 27 41	27.8	7	7.8 1 28 29	28.6	7	8 5.9 29 17	5	6	7 6.8 0 5	4	6	7 6 0 53	2	5	7 6 0 53	2	5	7	6 0 28	0.9	4				
30	9	2 26 29	6	6	6.8 0 27 17	4	6	8 4.9 28 5	3	5	7 7 28 52	1	5	7 6 29 40	0	4	6 4 0 28	0.9	4	6 4 0 28	0.9	4	6	4 0 28	0.9	4				
31	9	0 26 5	2	4	8 3.8 26 52	1	4	8 7 27 40	27.9	3	7 5 28 27	28.8	3	7 4 29 15	29.6	3	6 2 0 2	5	2	6 2 0 2	5	2	6	2 0 2	5	2				
32	9	2.8 25 40	25.8	2	8 6 26 28	26.7	2	8 5 27 15	6	2	7 3 28 2	4	1	9.6 2 28 49	3	1	10.6 0 29 36	1	0	5 6.8 2 9 10	29.8	3.9	5	6 2 8 43	4	7				
33	5.8	6 25 15	5	0	8 4 26 2	3	0	7 3 26 49	2	0	8.7 1 27 36	0	1.9	6 0 28 23	28.9	2.9	5 6 2 8 43	4	7	5 6 2 8 43	4	7	5 6 2 8 43	4	7					
34	8	4 2 4 50	1 28.9	8	3 2 5 37	25.9	29.8	7.7 1 26 23	26.8	0.8	6 4.9 27 10	27.6	8	6 5.8 27 56	5	7	5 6 2 8 43	4	7	5 6 2 8 43	4	7	5 6 2 8 43	4	7					
35	8	2 2 4 24	24.7	7	6.7 1 25 11	5	6	7 3.9 25 57	4	6	6 7 26 43	2	6	5 6 2 7 30	1	5	5 4 2 8 16	0	5	5 4 2 8 16	0	5	5 4 2 8 16	0	5					
36	8	0 23 58	3	5	7 2.9 24 44	1	4	7 7 25 30	0	4	6 5 26 17	26.8	4	5 4 2 7 2 27.6	3	4	4 2 2 7 48	28.5	3	4 2 2 7 48	28.5	3	4 2 2 7 48	28.5	3					
37	8	1.8 23 32	23.9	3	7 7 24 18	24.7	2	6 5 25 3 25.6	2	5	5 4 25 49	4	2	9.5 2 26 35	2	1	10.4 0 27 20	1	1	10.4 0 27 20	1	1	10.4 0 27 20	1	1					
38	5.7	6 23 5	4	1	7 4 23 51	3	0	6 3 24 36	1	0	8.5 2 25 22	25.9	0	4 0 26 7 26.8	1.9	3	5 5.8 26 52	27.6	2.9	5 5.8 26 52	27.6	2.9	5 5.8 26 52	27.6	2.9					
39	7	4 22 38	22.9	27.9	6 2 23 23	23.8	28.8	7.6 1 24 8 24.6	29.8	5	5 0 24 53	5	0.8	4 4.8 25 38	3	7	3 6 26 23	2	7	3 6 26 23	2	7	3 6 26 23	2	7					
40	7	2 22 11	5	6	6.6 0 22 55	3	6	5 2.9 23 40	2	6	4 3.7 24 25	0	5	4 5 25 9 25.8	5	3	3 3 25 54	26.7	5	3 3 25 54	26.7	5	3 3 25 54	26.7	5					
41	7	0 21 42	0	4	6 1.8 22 27	22.9	4	5 7 23 11	23.7	4	4 5 23 55	24.5	3	3 3 24 40	4	3	2 1 25 24	2	3	2 1 25 24	2	3	2 1 25 24	2	3					
42	6	0.8 21 14	21.5	2	6 6 21 58	4	1	5 5 22 42	2	1	8.4 2 23 26	0	1	9.3 0 24 10	24.9	1	10.2 4.8 24 53	25.7	0	5 6 24 22	1	1.8	5 6 24 22	1	1.8					
43	5.6	6 20 45	0 26.9	5	3 2 21 28	21.9	27.9	4 2 22 12	22.6	28.9	3 0 22 56	23.5	29.8	3 3.8 23 39	3	0.8	1 6 24 22	1	1.8	1 6 24 22	1	1.8	1 6 24 22	1	1.8					
44	6	4 20 15	20.5	6	6.5 1 20 58	3	6	7.4 0 21 42	1	6	3 2.7 22 25	0	6	2 5 23 8 23.8	6	1	1 3 23 51	24.6	5	1 3 23 51	24.6	5	1 3 23 51	24.6	5					
45	6	2 19 45	19.9	3	5 0.9 20 28	20.8	3	4 1.7 21 11	21.5	4	3 5 21 54	22.4	4	2 3 22 36	2	4	0 1 23 19	0	3	0 1 23 19	0	3	0 1 23 19	0	3					
46	5 29.9	19 14	3	1	5 7 19 57	2	1	3 5 20 39	0	1	8.2 3 21 22	21.9	1	2 0 22 4 22.7	1	0	0 3.8 22 46	23.5	1	0 3.8 22 46	23.5	1	0 3.8 22 46	23.5	1					
47	5	7 18 43	18.8	25.8	4 5.19 25 19.6	26.8	3	3 3 20 7 20.4	27.8	2	1 1 20 49	3 28.8	9.1 2.7 21 31	1 29.8	9.9 6 22 12 22.9	0.8	9.9 6 22 12 22.9	0.8	9.9 6 22 12 22.9	0.8	9.9 6 22 12 22.9	0.8	9.9 6 22 12 22.9	0.8						
48	5.5	4 18 11	2	5	6.4 3 18 52	0	5	7.3 0 19 34	19.8	5	2 1.8 20 15	20.7	5	1 5 20 57	21.5	5	9 3 21 38	3	5	9 3 21 38	3	5	9 3 21 38	3	5					
49	5	1 17 38	17.6	1	4 0 18 19	18.4	1	2 0.7 19 0	2	2	1 5 19 41	0	2	0 2 20 22	20.8	2	9 0 21 3 21.7	2	9 0 21 3 21.7	2	9 0 21 3 21.7	2	9 0 21 3 21.7	2						
50	5 28.9	17 4	0 24.8	4 29.7	17 45	17.8	25.8	2 4 18 25	18.6	26.8	8.1 2 19 6 19.4	27.8	0	1.9 19 46	2 28.8	8 2.7 20 27	0 29.8	8 2.7 20 27	0 29.8	8 2.7 20 27	0 29.8	8 2.7 20 27	0 29.8							
51	4	6 16 30	16.3	4	3 4 17 10	1	4	2 1 17 50	17.9	4	1 0.9 18 30	18.7	4	8.9 6 19 10	19.5	4	8 4 19 50	20.3	4	8 4 19 50	20.3	4	8 4 19 50	20.3	4					
52	5.4	4 15 55	15.6	0	6.3 1 16 34	16.4	0	7.1 29.8	17 14	2	0 0 6 17 53	0	0	9 3 18 33	18.8	0	9.7 1 19 12	19.6	0	9.7 1 19 12	19.6	0	9.7 1 19 12	19.6	0					
53	4	1 15 19	14.9	23.6	3 28.8	15 58	15.6	24.6	1 5 16 37	16.4	25.6	0 3 17 16	17.2	26.6	8 0 17 54	0 27.6	7	1.8 18 33	18.8	28.6	1.8 18 33	18.8	28.6	1.8 18 33	18.8	28.6				
54	3 27.8	14 42	1	1	2 5 15 20	14.8	1	0 2 15 59	15.6	1	7.9 0 16 37	16.4	1	7 0.7 17 15	17.2	1	6 5 17 54	0	2	6 5 17 54	0	2	6 5 17 54	0	2					
55	3	5 14 4	13.3	22.6	2 2 14 43	0	23.6	0 28.9	15 20	14.8	24.6	9 29.7	15 57	15.5	25.6	7 4 16 35	16.3	26.6	6 1 17 13	17.1	27.7	6 1 17 13	17.1	27.7	6 1 17 13	17.1	27.7			
56	3	2 13 25	12.5	0	1 27.9	14 2	13.1	1	6.9 6 14 39	13.9	1	8 3 15 17	14.6	1	6 0 15 54	15.4	1	5 0.7 16 31	16.2	2	5 0.7 16 31	16.2	2	5 0.7 16 31	16.2	2				

TABLE OF HOUSES FOR LATITUDES  $22^{\circ}$  TO  $56^{\circ}$ .

## UPPER MERIDIAN, CUSP OF 10th II.

H M S.						H M S.						H M S.						H M S.											
SID.	T.	10 46 9	10 49 53	10 53 37	10 57 20	11 1 3	11 4 46																						
ARC	161° 32'.2	10°	162° 28'.2	163° 24'.1	164° 20'.0	165° 15'.7	166° 11'.4																						
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3				
Lat.	Δ	η	ι	β	ω	Δ	η	ι	β	ω	Δ	η	ι	β	ω	Δ	η	ι	β	ω	Δ	η	ι	β	ω				
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°				
22	11.9	9.9	433	4.4	6.5	12.8	10.7	5.22	5.3	7.5	13.8	11.6	6.11	6.2	8.4	14.7	12.5	7.1	7.0	9.4	15.7	13.3	7.50	7.9	10.3				
23	8	7	4 9	1	4	8	5	4 58	0	3	7	4	5 47	5.8	3	7	3	6 36	6.7	3	6	1	7 25	6	2	6	0 5 13		
24	8	5	3 45	3.8	3	7	3	4 34	4.6	2	7	2	5 22	5	2	6	1	6 11	4	1	6 12.9	7 0	2	1	5 13.5	7 48	1	0	
25	8	3	3 21	5	1	7	1	4 9	3	1	7	0	4 58	2	0	6 11.9	5 46	0	0	5	7	6 35	6.9	0	5	6 7 23	7.8	10.9	
26	7	1	2 56	1	0	7	9.9	3 44	0	6.9	6 10.8	4 33	4.8	7.9	6	7	5 21	5 7	8.9	15.5	5	6 9	6	9.8	4	4 6 57	4	8	
27	11.7	8.9	2 31	2.8	5.8	12.6	7	3 19	3.6	8	13.6	6 4	7	5	8	14.5	4	4 55	4	7	4	3 5 43	2	7	16.4	1 6 31	1	6	
28	7	7	2 6	4	7	6	5	2 54	3	6	5	4	3 42	2	6	5	2	3 30	0	6	4	1	5 17	5.9	5	3 12.9	6 5	6.7	5
29	6	5	1 41	1	5	6	3	2 28	2.9	5	5	2	3 16	3.8	5	4	0	4 4	4.7	4	4 11.9	4 51	5	4	3	7 5 39	4 10.4		
30	6	3	1 15	1.7	4	5	1	2 3	6	6.3	4	9.9	2 50	4	7.3	4 10.8	3 37	3	3 15.3	6	4 25	2	2	2 5 5 12	0	2			
31	6	1	0 49	4	2	12.5	8.9	1 36	2	2	4	7	2 24	1	1	14.3	6	3 11	3.9	1	3	4 3 58	4.8	1	2	2 4 45	5.7	0	
32	11.5	7.9	0 23	0	0	4	7	1 10	1.9	0	13.4	5	1 57	2.7	0	3	4	2 41	6	7.9	2	2 3 30	4	8.9	16.1	0 4 17	3 49		
33	5	6 29 56	0.6	4.8	4	5	0 43	5	5.8	3	3	1 30	3	6.8	2	1	2 16	2	8	2	0 3 3	0	7	11.8	3 49	4 9	7		
34	4	4 29 29	2	6	3	2	0 16	1	7	3	1	1 2	1.9	6	2	9.9	1 48	2.8	6	15.1	10.7	2 35	3.6	6	0	5 3 21	5	5	
35	4	2 29	2 29.8	5	12.3	0 29 48	0.7	5	2	8.8	0 34	5	4 14.1	6 1 20	4	4	1	5 2 6	2	4	0	3 2 52	1	4					
36	4	0 28 34	4	3	3	7.8	2 29	20	3	3	2	6 0 6	1	2	1	4 0 51	0	2	0	2 1 37	2.8	2	15.9	0 2 23	3.7	2			
37	11.3	6.8	28 6	0	1	2	6 28	51 29.8	1	13.1	4 29 37	0.7	0	0	0	2 0 22	1.5	0	0	0 1 7	4	0	9 10.8	1 53	2	0			
38	3	6 27 37	28.5	3.9	2	4 28 22	4	4.9	1	2 29	7	2	5.8	0	0	0 29 53	1	6.8	14.9	9.8	0 37	1.9	7.8	8	5 1 23	2.5	5.5		
39	2	4 27 8	0	7	12.1	2 27 53	28.9	7	0	0 28 38	29.7	6	13.9	8.8 29 22	0.6	6	8	6 0 7	4	6	6	7 3 0 52	3	6					
40	2	1 26 38	27.5	5	1	6.9	27 23	4	4	0	7.7	28 7	2	4	9	5 28 52	1	4	8	3 29 36	0.9	4	7	0 0 21	1.8	4			
41	11.1	5.9	26 8	0	2	0	7 26	52 27.9	2	12.9	5 27 36	28.7	2	8	3 28 20 29.6	2	7	0 29 5	4	2	15.6	9 7 21 49	3	2					
42	1	6 25 38	26.5	0	0	4 26 21	4	0	9	2 27	5	2	0	8	0 27 49	1	0	7	8 8 28 32	29.9	0	6	5 2 16	0.8	7.9				
43	0	4 25 6	0	2.8	11.9	1 25 49	26.8	3.8	8	6.9	26 33	27.7	4.7	13.7	7 7 27 16	28.5	5.7	14.6	5 27 59	4	6.7	5	2 28 43	2	7				
44	0	1 24 34	25.4	5	9	5.9	25 17	3	5	8	7 26	0	1	5	6	4 26 43	0	5	5	2 27 26	28.8	5	4	8 9 28	9 29	7			
45	10.9	4.8	24 24.9	3	8	6 24 44	25.7	3	7	4 25 27	26.5	3	6	1 26	9 27.4	3	5	7.9	26 52	2	2	3	6 27 34	1	2				
46	9	5 23 28	3	1	8	3 24 10	1	0	12.6	1 24 52	25.9	0	5	6.8	25 34 26.8	0	4	6 26 16	27.6	0	15.3	3 26 59	28.8	0					
47	8	3 22 54	23.7	1.8	7	1 23 36	24.5	2.7	6	5.8	24 17	3	3.7	13.4	5 24 59	2	4.7	3	3 25 41	0	5.7	2	0 26 22	27.9	6.7				
48	8	0 22 19	1	5	11.7	4 8 23	0 23.9	4	5	5	5 23 42	24.7	4	4	4	2 24 23 25.6	4	14.2	0 21	4 26 4	4	1	7 7 25 48	2	4				
49	10.7	3.7	21 44 22.4	2	6	5 22 24	3	1	5	2 23	5	1	1	3	5.9	23 46 24.9	1	2	6 7 24 27	25.7	1	1	4 28	7 26.5	1				
50	7	4 21	7 21.8	0.8	6	2 21 47	22.6	1.8	4	4.9	22 28	23.4	2.8	3	6 23	8	2	3.8	1	4 23 48	0	4.8	0	1 24 28	25.9	5.8			
51	6	1 20 30	1	4	5	3.9	21	9 21.9	4	12.3	6 21 49	22.7	4	13.2	3 22 29	23.5	4	1	1 23	9 24.3	4 14.9	6 8 23 49	2	4					
52	6	2.8	19 52 20.4	0	11.5	6 20 31	1	0	3	3 21 10	21.9	0	2	0 21 49	22.7	0	3	5 21 38	23.5	0	9	4 23	8 24.4	1					
53	10.5	5 19 12	19.6	4	2 19 51	20.3	0.6	2	3 9 20 29	1	1.6	1	7 21	8 21 9	2.6	13.9	0 21 47	12.7	3.6	8	1 22	7 23	4	7					
54	5	2 18 32	18.8	2	3	2.9	19 10	19.5	2	2	6 19 48	20.3	2	0	3 20 26	1	2	8	0 21	3 21	4	2	7 5 7 21 4	1	3				
55	4	1.8	17 50	17.9	28.7	2	5 18 28	18.6	29.7	1	2 19	3 19 4	0.7	12.9	3 9 19 43 20.2	1.8	5	4 6 20 20	0	2.8	6	3 20 58	21.8	7					
56	3	4 17	7	0	2	1	1 17 45	17.7	2	1	2 8 18 21	18.5	2	9	3 18 58	19.3	3	7	2 19 35	20.0	3	5 4 9 20	12 20.8	4					

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H.	H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.															
	SID. T.	11	4	46	15°	11	8	28	16°	11	12	10	17°	11	15	52	18°	11	19	33	19°	11	23	15	20°											
ARC	166°	11'	4	167°	7'	0	168°	2'.	5	168°	58'.	0	169°	53'.	4	170°	48'.	7																		
Lat.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3											
22°	16.6	14.2	8.38	8.8	11.3	17.6	15.0	9.27	9.6	12.3	18.5	15.9	10.16	10.5	13.2	19.4	16.7	11.5	11.4	14.2	20.4	17.6	11.53	12.3	15.2	21.3	18.4	12.42	13.1	16.1						
23	6	0	8.13	4	2	5	14.8	9	2	3	1	4	7	9.51	2	1	4	5	10.39	1	1	3	4	11.28	11.9	0	2	2	12.16	12.8	0					
24	5	13.8	7.48	1	0	5	6	8.37	0	0	4	5	9.25	9.8	0	3	3	10.14	10.7	13.9	2	2	11.2	6	14.9	2	0	11.50	5	15.9						
25	5	6	7.23	7.8	10.9	4	4	8.11	8.6	11.9	3	2	8.59	5	12.8	3	1	9.48	4	8	2	16.9	10.36	3	8	1	17.8	11.24	2	8						
26	4	4	6.57	4	8	17.4	2	7.45	3	8	3	0	8.33	2	7	2	15.8	9.22	1	7	20.1	7	10.10	10.9	7	1	6	10.58	11.8	7						
27	16.4	1	6.31	1	6	3	0	7.19	0	6	18.2	14.8	8	7	8.8	6	19.2	6	8.55	9.7	6	1	5	9.43	6	5	0	3	10.31	5	5					
28	3	12.9	6	5	6.7	5	3	13.7	6.53	7.6	5	2	6	7.40	5	4	1	4	8.28	4	13.4	0	2	9.16	2	14.4	20.9	1	10	3	1	15.4				
29	3	7	5.39	4	10.4	2	5	6.26	3	11.3	1	3	7.14	1	12.3	0	2	8	1	0	3	19.9	0	8.48	9.9	3	9	16.8	9.36	10.8	3					
30	2	5	5.12	0	2	17.1	3	5.59	6.9	2	1	1	6.46	7.8	2	0	14.9	7.34	8.6	1	9	15.8	8.21	5	1	8	6	9	8	4	1					
31	2	2	4.45	5.7	0	1	1	5.32	5	0	0	13.9	6.19	4	0	18.9	7	7	6	3	0	8	5	7.53	2	0	7	3	8.40	1	0					
32	16.1	0	4.17	3	9.9	0	12.8	5	4	2	10.9	17.9	6	5.51	0	11.9	9	5	6.37	7.9	12.8	8	3	7.24	8.8	13.8	7	1	8.11	9.7	14.8					
33	1	11.8	3.49	4.9	7	0	6	4.36	5.8	7	9	4	5.22	6.7	7	8	2	6	9	5	7	7	0	6.55	4	7	20.6	15.8	7.42	3	7					
34	0	5	3.21	5	5	16.9	3	4	7	4	5	8	1	4.53	3	5	7	0	5.39	1	5	19.6	14.8	6.26	0	5	5	6	7.12	8.9	5					
35	0	3	2.52	1	4	9	1	3.38	0	4	8	12.9	4.24	5.8	4	7	13.7	5.10	6.7	4	6	5	5.56	7.6	3	5	5	3	6.42	5	3					
36	15.9	0	2.23	3.7	2	8	11.8	3	8	4.5	2	17.7	6	3.54	4	2	18.6	4	4.40	3	2	5	2	5.25	2	2	4	0	6.11	0	2					
37	9	10.8	1.53	2	0	7	6	2.38	1	0	6	4	3.24	0	0	5	2	4	9	5.8	0	4	0	4.55	6.7	0	3	14.8	5.40	7.6	0					
38	8	5	1.23	2.8	8.8	7	3	2	8	3.6	9.8	6	1	2.53	4.5	10.8	5	12.9	3.38	4	11.8	4	13.8	4	23	3	12.8	20.2	5	5	8	1	13.8			
39	7	3	0.52	3	6	16.6	1	1.37	1	6	5	11.8	2.21	0	6	4	6	3	6	4.9	6	19.3	5	3.51	5.8	6	2	3	4.36	6.6	6					
40	7	0	0.21	1.8	4	6	10.8	1	5	2.6	4	17.4	6	1.49	3.5	4	3	4	2.34	4	4	2	2	3.18	2	4	1	0	4	3	1	4				
41	15.6	9.7	29.49	3	2	5	5	0.33	1	2	4	3	1.17	0	2	18.3	1	2	1	3.9	2	1	12.9	2.45	4.7	2	0	13.7	3.29	5.6	2					
42	6	5.29	16	0.8	7.9	4	2	0	0	1.6	8.9	3	0	0.43	2.5	9.9	2	11.8	1.27	3	0	1	6	2.11	2	0	19.9	4	2.55	1	0					
43	5	2.28	43	2	7	4	0	29	26	1	7	2	10.7	0	9	1.9	7	1	5	0.53	2.8	10.7	0	3	1.36	3.6	11.7	9	1	2.20	4.5	12.8				
44	4	8.9	28	9	29.7	4	16.3	9.7	28	52	0.5	5	17.2	4	29	35	3	5	0	2	0.18	2	5	18.9	0	1	1	1	5	8	12.8	1.44	3.9	5		
45	3	6.27	34	1	2	2	4	28	17	29.9	3	1	2	2.859	0.7	3	17.9	10.9	29	42	1.6	3	8	11.7	0.24	2.5	3	7	5	1.7	3	3				
46	15.3	3.26	59	28.5	0	1	1	1.27	41	3	1	0	9.9	28	23	1	1	8	6.29	5	0	1	7	4.29	47	1.9	1	19.6	2	0.30	2.7	1				
47	2	0.26	22	27.9	6.7	0	8.8	27	4	28.7	7.8	0	6	27	46	29.5	8.8	8	3.28	28	0.4	9.8	7	0.29	9	2	10.9	5	11.9	29	51	1	11.8			
48	1	7.7	25	45	2	4	0	5	26	26	0	5	16.9	3	27	8	28.9	5	7	0.27	49	29.7	5	18.6	10.7	28	30	0.6	6	4	5.29	12	1.4	5		
49	1	4.25	7	26.5	1	15.9	2	2.25	48	27.4	2	8	0.26	29	2	2	17.6	9.7	27	10	1	2	5	3.27	51	29.9	3	3	3	2.28	31	0.8	3			
50	0	1.24	28	25.9	5.8	8	7.8	25	9	26.7	6.9	7	8.6	25	49	27.5	7.9	5	3.26	29	28.4	8.9	4	0	2.27	10	2	0	19.2	10.8	27	50	1	0		
51	14.9	6.8	23	49	2	4	7	5	24	28	25.9	5	6	3.25	8	26.8	6	5	0.25	48	27.6	6	3	9.7	26	28	28.5	9.7	1	4.27	8	29.3	10.7			
52	9	4.23	8	24.4	1	7	1	2.3	47	1	1	16.6	7.9	24	26	0	2	4	8.6	25	5	26.8	2	18.2	3	25	45	27.7	3	0	0	26	24	28.5	4	
53	8	1.22	26	23.6	4.7	15.6	6.8	23	4	24.3	5.7	5	5	5.23	43	25.1	6.8	17.3	2	24	22	25.9	7.8	1	8.9	25	0	26.8	8.9	18.9	9.6	25	39	27.7	0	
54	7	5.7	21	42	22.7	3	5	4	22	20	23.4	3	4	1	2.22	58	24.2	4	2	7.8	23	37	0	4	0	5	24	15	25.9	5	8	2	24	53	26.8	9.6
55	6	3.20	28	21.8	3.9	4	0.21	35	22.5	4.9	3	6	6.7	22	13	23.3	0	1	4.22	50	24.1	0	17.9	1	23	28	24.9	1	7	8.8	24	5	25.8	2		
56	5	4.9	20	12	20.8	4	3	5.6	20	49	21.5	4	2	3	21	26	22.3	5.5	0	0.22	3	23.1	6.5	8	7.7	22	39	23.9	7.6	6	4	23	16	24.8	8.7	

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.													
SID. T. 11 26 56					11 36 37					11 34 18					11 37 58					11 41 39													
ARC 171° 44'.0					172° 39'.2					173° 34'.4					174° 29'.6					175° 24'.7													
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3								
Lat.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°								
22	22.2	19.3	13.31	14.0	17.1	23.2	20.1	14.20	14.9	18.1	24.1	21.0	15.9	15.8	19.1	25.0	21.8	15.58	16.7	20.0	25.9	22.7	16.47	17.6	21.0								
23	2	1	13	5	13.7	0	1	19.9	13.54	6	0	0	20.7	14.43	5	18.9	24.9	6	15.31	4	19.9	9	4	16.20	3	20.9							
24	1	18.8	12.39	4	16.9	0	7	13.28	2	17.8	0	5	14.16	2	8	9	3	15.5	0	8	8	2	15.53	16.9	8	7							
25	0	6	12.13	0	8	0	4	13.1	13.9	7	23.9	3	13.49	14.8	7	8	1	14.38	15.7	7	7	21.9	15.26	6	7								
26	0	4	11.46	12.7	6	22.9	2	12.34	6	6	8	0	13.22	5	6	7	20.9	14.10	4	6	7	7	14.58	3	6	26.6							
27	21.9	1	11.19	4	5	8	0	12.6	2	5	7	19.8	12.55	1	18.5	7	6	13.43	0	19.5	25.6	4	14.31	15.9	5	5							
28	9	17.9	10.51	0	16.4	8	18.7	11.39	12.9	17.4	7	5	12.27	13.8	3	24.6	4	13.15	14.7	3	5	2	14.3	6	20.3	4							
29	8	7	10.23	11.7	2	7	5	11.11	5	2	23.6	3	11.59	4	2	5	1	12.46	3	2	4	20.9	13.34	2	2	3							
30	7	7	4	9.55	3	1	6	2	10.43	2	1	5	0	11.30	1	1	4	19.8	12.17	0	1	3	7	13.5	14.9	1	26.3						
31	6	2	9.27	10.9	0	22.5	0	10.14	11.8	0	5	18.8	11.1	12.7	17.9	4	6	11.48	13.6	18.9	25.3	4	12.35	5	0	2	21.3	23	4	0			
32	21.6	16.9	8.57	6	15.8	5	17.7	9.44	5	16.8	4	5	10.31	3	8	3	3	11.19	2	8	2	1	12.6	1	19.8	1	20.9	12.53	0	20.5			
33	5	6	8.28	2	7	4	4	9.15	1	7	23.3	2	10	11.9	6	24.2	0	10.48	12.8	7	1	19.9	11.35	13.7	7	0	7	12.22	14.6	7			
34	4	4	7.58	9.8	5	3	2	8.45	10.7	5	2	0	9.31	5	5	1	18.8	10.18	4	5	0	6	11.4	3	5	25.9	4	11.51	2	5			
35	4	1	7.28	4	3	22.3	16.9	8.14	2	3	1	17.7	9.0	1	17.3	0	5	9.46	0	18.3	24.9	3	10.33	12.9	4	8	1	11.19	13.8	4			
36	3	15.9	6.57	8.9	2	2	6	7.43	9.8	2	0	4	8.29	10.7	2	0	2	9.15	11.5	2	8	0	10.1	4	2	7	19.8	10.47	3	2			
37	21.2	6	6.26	5	0	1	3	7.11	3	0	22.9	1	7.57	2	0	23.9	17.9	8.42	1	0	8	18.7	9.28	0	0	6	5	10.14	12.9	1			
38	1	4	5.53	0	14.8	0	1	6.39	8.9	15.8	8	16.9	7.24	9.7	16.8	8	6	8	9.10.6	17.8	7	7	4	8.55	11.5	18.9	25.6	2	9.40	4	19.9		
39	1	1	5.21	7.5	6	21.9	15.8	6.6	4	6	7	6	6.51	3	6	7	4	7.36	1	7.24.6	2	8.21	0	7	5	0	9	6	11.9	7			
40	0	14.8	4.47	0	4	9	5	5.32	7.9	4	6	3	6.17	8.8	5	6	1	7.2	9.6	5	5	17.9	7.46	10.5	5	4	18.7	8.31	4	5			
41	20.9	5	4.13	6.5	2	8	2	4.58	4	2	22.6	15.9	5.42	2	3	5	16.8	6.27	1	3	4	6	7.11	0	3	3	4	7.56	10.9	3			
42	8	2	3.39	5.9	0	7	14.9	4.23	6.8	0	5	6	5.7	7.7	0	23.4	5	5.51	8.6	1	3	3	6.35	9.5	1	25.2	0	7.19	4	1			
43	7	13.9	3.3	4	13.8	21.6	6	3.47	3	14.8	5	3	4.30	1	15.8	3	2	5.14	0	16.8	24.2	16.9	5.58	8.9	17.9	1	17.7	6.42	9.8	18.9			
44	6	5	2.27	4.8	5	5	3	3.10	5.7	6	4	0	3.53	6.5	6	2	15.9	4.37	7.4	6	1	6	5.20	3	6	0	3	6.4	2	7			
45	20.6	2	1.50	2	3	4	0	2.33	1	4	22.3	14.7	3.16	5.9	4	1	5	3.58	6.8	4	0	2	4.41	7.7	4	24.9	0	5.25	8.6	6			
46	5	12.9	1.12	3.6	1	3	13.7	1.54	4.5	2	2	4	2.37	3	2	0	2	3.19	2	2	23.9	15.9	4.2	1	2	8	16.6	4.44	0	4			
47	4	6	0.33	2.9	12.9	21.2	4	1.15	3.8	13.9	1	0	1.57	4.7	0	22.9	14.9	2.39	5.5	0	8	6	3.21	6.4	0	7	3	4	3	7.3	2		
48	3	3.29	53	3	6	1	0	0.35	2	6	0	13.6	1.16	0	14.8	8	5	1.58	4.9	15.7	7	2	2.40	5.7	16.8	6	15.9	3.21	6.6	0			
49	20.2	11.9	29.12	1.6	3	0	12.6	29.53	2.5	4	21.9	3	0.34	3.3	5	7	1	1.15	2	5	6	14.8	1.57	1	5	24.4	5	2.38	0	17.7			
50	1	5	28.30	0.9	0	20.9	2	29.11	1.8	1	8	12.9	29.51	2.6	2	6	13.7	0.32	3.5	2	5	4	1.13	4.4	3	3	1	1.54	5.3	4			
51	0	1	27.48	1	11.7	8	11.8	28.27	0	12.8	7	5	29.7	1.8	13.9	5	3	29.47	2.7	14.9	23.4	0	0.28	3.6	0	2	14.7	1	8	4.5	1		
52	19.9	10.7	27	3.29	3	4	7	4.27	4.2	0	2	5	6	1.28	22	0	6	22.4	12.9	29.2	1	19	6	3	13.6	29.41	2.8	15.7	1	3	0.21	3.7	16.8
53	8	3	26.18	28.5	1	6	0	26.56	29.3	1	21.5	11.7	27.35	0	2	2	3	5.28	14	0	3	2	2.28	5.3	1.9	4	23.9	13.9	2.33	2.8	5		
54	7	9.9	25.31	27.6	10.7	20.5	10.6	26	9	28.4	11.7	4	3.26	47	29.2	12.8	2	1.27	26	0	1.13.9	0	12.8	28.4	0	9	0	8	5.28	43	1.8	1	
55	6	5.24	43	26.6	3	4	2.25	20	27.4	3	2	10.9	25.58	28.2	4	0	11.6	26.2	29.1	5	22.8	3	27.13	29.9	14.6	6	0	27.91	0	7	15.7	7	
56	5	1.23	53	25.5	9.8	3	9.8	24.30	26.3	10.9	1	4.25	7.27	1	0	21.9	1.25	44	28.0	1	7	11.8	26.21	28.8	1	5	12.5	26.58	29.6	7			

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.												
SID. T.	11	45	19	ng	11	48	59	ng	27°	11	52	40	ng	28°	11	56	20	ng	29°	12	0	0	ng	0°	12	3	40	ng	1°								
ARC	176°	19'	8	26°	177°	14'	8			178°	0'	9			179°	54.0				180°	0'	0			180°	55'	0			180°	55'	0					
Lat.	11	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3						
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°							
22	26.9	23.5	17	36	18.5	22.0	27.8	24.3	18	24	19.4	23.0	28.7	25.2	19	14	20.3	24.0	29.7	26.0	20	3	21.2	25.0	0.6	26.8	20	52	22.1	26.0	1.5	27.7	21	41	23.0	27.0	
23	8	3	17	9	2	21.9	7	1	17	57	1	22.9	6	24.9	18	47	0	23.9	6	25.8	19	36	20.9	24.9	5	6	20	25	21.8	25.9	4	4	21	14	22.7	26.9	
24	7	0	16	42	17.8	8	7	23.8	17	30	18.7	8	6	7	18	19	19.6	8	5	5	19	8	5	8	4	3	19	57	4	8	3	2	20	46	4	8	
25	6	22.8	16	15	5	7	6	6	17	3	4	7	5	4	17	52	3	7	4	2	18	40	2	7	3	1	19	29	1	7	2	26.9	20	18	0	7	
26	26.6	5	15	47	2	6	27.5	3	16	35	1	6	4	2	17	24	0	6	3	0	18	12	19.9	6	0.2	25.8	19	1	20.8	6	1.1	6	19	50	21.7	6	
27	5	3	15	19	16.8	4	4	1	16	7	17.7	5	28.3	23.9	16	55	18.6	5	29.3	24.7	17	44	5	5	2	5	18	33	4	5	0	4	19	21	4	5	
28	4	0	14	50	5	21.3	3	22.8	15	38	4	22.3	3	6	16	26	3	23.3	2	4	17	15	2	24.4	1	3	18	4	1	25.4	0	1	18	51	0	26.4	
29	3	21.7	14	22	1	2	3	5	15	9	0	2	2	4	15	57	17.9	2	1	2	16	45	18.9	3	0	0	17	34	19.8	3	0.9	25.8	18	22	20.7	3	
30	26.3	5	13	53	15.8	1	27.2	3	14	40	16.7	1	1	1	15	28	6	1	0	23.9	16	16	5	2	29.9	24.7	17	4	4	2	8	5	17	52	3	2	
31	2	2	13	23	4	0	1	0	14	10	3	0	0	0	22.8	14	58	2	0	28.9	6	15	45	1	0	8	4	16	34	0	1	7	2	17	21	0	0
32	1	20.9	12	53	0	20.8	0	21.7	13	39	15.9	21.8	27.9	5	14	27	16.8	22.8	8	3	15	15	17.8	23.9	7	2	16	3	18.7	0	6	0	16	50	19.6	25.9	
33	0	7	12	22	14.6	7	26.9	5	13	9	5	7	8	2	13	56	4	7	7	1	14	43	4	8	6	23.9	15	31	3	24.8	5	24.7	16	18	2	8	
34	25.9	4	11	51	2	5	8	2	12	38	1	5	7	0	13	24	0	6	6	22.8	14	11	0	6	5	6	14	59	17.9	7	0.4	4	15	45	18.8	6	
35	8	1	11	19	13.8	4	7	20.9	12	6	14.7	4	6	21.7	12	52	15.6	4	5	5	13	39	16.6	5	29.4	3	14	26	5	6	3	1	15	13	4	5	
36	7	19.8	10	47	3	2	6	6	11	33	2	2	5	4	12	19	1	2	28.4	2	13	6	1	23.3	3	0	13	52	0	4	2	23.8	14	39	17.9	25.3	
37	6	5	10	14	12.9	1	5	3	11	0	13.8	1	27.4	1	11	46	14.7	1	3	21.9	12	32	15.7	2	2	22.7	13	18	16.6	3	1	4	14	5	5	2	
38	25.6	2	9	40	4	19.9	26.4	0	10	26	3	20.9	3	20.8	11	12	2	21.9	2	6	11	58	2	0	1	3	12	44	1	1	29.9	1	13	30	0	0	
39	5	0	9	6	11.9	7	3	19.7	9	52	12.8	7	2	5	10	37	13.7	8	1	3	11	23	14.7	22.9	0	0	0	12	8	15.6	23.9	8	22.8	12	54	16.5	24.9
40	4	18.7	8	31	4	5	2	4	9	16	3	6	1	1	10	1	2	6	0	0	10	47	2	7	28.9	21.7	11	32	1	7	7	5	12	17	0	8	
41	3	4	7	56	10.9	3	1	0	8	40	11.8	4	0	19.8	9	25	12.7	4	27.9	20.7	10	10	13.7	6	8	3	10	55	14.6	6	6	6	11	40	15.5	6	
42	25.2	0	7	19	4	1	0	18.7	8	4	3	2	26.9	5	8	48	2	2	8	3	9	32	1	4	6	0	10	17	1	4	5	21.7	11	2	0	4	
43	1	17.7	6	42	9.8	18.9	25.9	4	7	26	10.7	0	8	1	8	10	11.6	1	6	0	8	54	12.6	2	5	20.7	9	38	13.5	2	29.4	4	10	22	14.4	2	
44	0	3	6	4	2	7	8	0	6	47	1	19.9	7	18.8	7	31	0	20.9	5	19.6	8	15	0	0	28.4	4	8	59	12.9	0	2	0	9	42	13.8	0	
45	24.9	0	5	25	8.6	6	7	17.7	6	8	9.5	7	6	5	6	51	10.4	7	4	2	7	34	11.4	21.8	3	0	8	18	3	22.8	1	20.6	9	1	2	23.8	
46	8	16.6	4	44	0	4	6	4	5	27	8.9	5	5	2	6	10	9.7	5	27.3	18.9	6	53	10.7	6	2	19.6	7	36	11.7	5	0	3	8	19	12.6	6	
47	7	3	4	3	7.3	2	5	1	4	46	2	3	26.4	17.8	5	28	1	3	2	5	6	10	1	4	1	2	6	53	0	3	28.9	19.9	7	36	11.9	5	
48	6	15.9	3	21	6.6	0	25.4	16.7	4	3	7.5	1	3	4	4	45	8.4	1	1	1	5	27	9.4	2	27.9	18.8	6	9	10.3	1	8	5	6	52	2	3	
49	24.4	5	2	38	0	17.7	3	3	3	19	6.8	18.8	1	0	4	1	7.7	19.8	0	17.7	4	42	8.7	20.9	8	4	5	24	9.6	21.9	6	1	6	6	10.5	1	
50	3	1	1	54	5.3	4	1	15.9	2	34	1	5	0	16.6	3	15	0	5	26.8	3	356	7.9	6	7	0	4	38	8.8	7	5	18.7	5	19	9.7	22.9		
51	2	14.7	1	8	4.5	1	0	5	1	48	5.3	2	25.8	2	229	6.2	2	6	16.9	3	9	1	4	6	17.6	3	50	0	4	28.3	3	430	8.9	6			
52	1	3	0	21	3.7	16.8	24.9	1	1	1	4.5	17.9	7	15.8	1	40	5.4	18.9	5	5	220	6.3	1	27.4	2	3	1	7.1	1	1	17.9	3	40	0	3		
53	23.9	13.9	29	33	2.8	5	8	14.6	0	12	3.6	6	6	3	0	51	4.5	6	4	0	130	5.4	19.8	2	16.7	2	10	6.2	20.8	0	4	2	49	7.1	0		
54	8	5	28	43	1.8	1	6	1	29	21	2.6	2	5	14.8	0	0	3.5	3	3	15.5	0	38	4.4	4	0	2	117	5.2	5	27.9	16.9	1.56	6.1	21.7			
55	6	0	27	51	0.7	15.7	4	13.6	28	29	1.6	16.8	3	3	329	7	2.5	0	1	0	29	45	3.3	1	26.9	15.7	0	23	4.2	2	7	4	1	1	5.1	4	
56	5	12.5	26	58	29.6	3	3	1	27	35	0.5	4	2	13.8	28	13	1.4	17.6	25.9	14.5	28	50	2.2	18.7	7	2	29	28	3.0	19.9	5	15.9	0	5	4.0	1	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.												H. M. S.												H. M. S.											
SID. T. 12 7 20						12 11 1						12 14 41						12 18 21						12 22 2											
ARC 181° 50'.1						182° 45'.2						183° 40'.2						184° 35'.3						185° 30'.4											
11	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	m	m	t	t	��	m	m	t	t	��	m	t	t	��	時	m	t	t	��	時	m	t	t	��	時	m	t	t	��	時					
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°							
22	2.4	28.5	22 31	23.9	28.0	3.3	29.3	23 20	24.8	29.0	4.2	0.2	24 10	25.7	0.0	5.1	1.0	24 59	26.6	1.1	6.0	1.8	25 49	27.6	2.1	6.9	2.6	26 40	28.5	3.1					
23	3	2 22	3	6 27.9	2	1 22	53	5 28.9	1 29.9	23 42	4 29.9	0	0.7	24 31	3	0	5.9	5 25	21	3	0	8	4 26	11	2	0	7	1 25	43	27.9	2.9				
24	2	0 21	35	3	8	1 28.8	22 25	2	8	0	6 23	14	1	9	4.9	5 24	3	0	0.9	8	3 24	53	0	1.9	7	1 25	43	27.9	2.9						
25	1	27.7	21	7 22.9	7	0	6 21	56	23.9	7	3.9	4 22	45	24.8	8	8	2 23	35	25.7	8	7	0 24	24	26.6	8	6	1 25	14	6	8					
26	0	5 20	38	6	6	2.9	3 21	27	5	6	8	1 22	17	4	7	7 29.9	23	6	4	7	6	0 7	23	55	3	7	5	5 24	45	3	7				
27	1.9	2 20	9	3	5	8	0 20	58	2	5	7 28.8	21	47	1	6	6	6 22	36	0	6	5	4 23	26	0	6	6.4	3 24	15	26.9	7					
28	8	26.9	19 40	21.9	27.4	7 27.7	20 29	22.9	28.4	6	5 21	18	23.8	29.5	5	4 22	6 24.7	5	5.4	2 22	56	25.7	5	3	0 23	45	6	26							
29	7	6 19	10	6	3	6	4 19	59	5	3	5	3 20	47	4	3	4.4	1 21	36	4	0.4	3 29.9	22	25	3	1.4	2	0 7	23	14	3	5				
30	7	3 18	40	3	2	5	2 19	28	2	2	3.4	0 20	17	1	2	3 28.8	21	5	0	3	2	6 21	54	0	3	1	4 22	43	25.9	4					
31	6	1 18	9 20.9	1	2.4	26.9	18 57	21.8	1	3 27.7	19 45	22.8	1	2	5 20	34	23.7	2	1	3 21	22	24.6	2	0	1 22	11	6	3							
32	1.5	25.8	17 37	5 26.9	3	6 18	26	4	0	2	4 19	14	4	0	1	2 20	1	3	1	0	0 20	50	3	1	5.8	29.8	21 38	2	2.2						
33	4	5 17	5	1	8	2	3 17	53	0 27.8	1	1 18	41	0 28.9	0 27.9	19 29	22.9	0	4.9	28.7	20 17	23.9	0	7	5 21	5 24	8	1								
34	3	2 16	33	19.7	7	1	0 17	20	20.6	7	0 26.8	18	8 21.6	8	3.9	6 18	56	5 29.8	7	4 19	44	5	0.9	6	2 20	32	4	0							
35	1	24.9	15 59	3	5	0 25.7	16 47	2	6	2.9	5 17	34	2	6	8	2 18	22	1	7	6	0 19	9	0	8	5 28.8	19 57	0	1.9							
36	0	5 15	26	18.9	26.4	1.9	3 16	13	19.8	5	8	1 17	0 20.7	5	6 26.9	17 47	21.7	6	5 27.7	18 35	22.6	7	5.4	5 19	22	23.5	7								
37	0.9	2 14	51	4	2	8	0 15	38	3 27.3	6 25.8	16 25	3 28.4	5	6 17	12	2	5	4.4	4 17	59	1	5	3	2 18	47	1	6								
38	8	23.9	14 16	17.9	1	7 24.7	15	2 18.9	2	5	5 15	49	19.8	2	3.4	3 16	36	20.7	29.3	3	0 17	23	21.7	0.4	1	1 27.8	18 10	22.6	5						
39	7	6 13	40	5	0	6	4 14	26	4	0	2.4	1 15	12	3	1	3 25.9	15 59	2	2	2 26.7	16 46	2	3	0	5 17	32	1	1.4							
40	6	3 13	3	0 25.9	1.4	1 13	49	17.9	26.9	3 24.8	14 35	18.8	0	2	6 15	21	19.7	1	0	4 16	7 20.7	2	4.9	2 21	6 4	21 6	2								
41	5	0 12	25	16.4	7	3 23.8	13 11	4	7	2	4 13	57	3 27.9	0	2 14	42	2 28.9	3.9	0 15	28	2	0	8 26	9 16	15	1	1								
42	0.3	22.6	11 47	15.9	5	2	4 12	32	16.8	5	0	1 13	17	17.8	7	2.9	24.8	14	3 18.7	8	8 25.6	14 48	19.6	29.9	6	5 15	34	20	0	9					
43	2	3 11	7	3	3	1	0 11	52	3	4	1.9	23.7	12 37	2	5	8	5 13	22	1	6	6	3 14	7	1	7	5	1 14	53	0	8					
44	1	2 19.9	10 27	14.7	1	0.9	22.7	11 11	15.7	2	8	3 11	56	16.6	4	6	1 12	40	17.5	4	5 24.9	13 25	18.5	6	4.3	25.7	14 10	19.4	6						
45	0	5 9 45	1 24.9	8	3 10	29	1	0	6 22.9	11 13	0	2	5 23.7	11 58	16.9	3	3.3	5 12	42	17.8	4	2	3 13	27	18.8	5									
46	29.9	1	9 3 13.5	8	7 21.9	9 46	14.4	25.8	5	5 10 30	15.3	0	2.3	3 11	14	3	1	2	1 11	58	2	2	0 24	9 12 42	1	0.3									
47	8	20.7	8 19	12.8	6	6	5 9	2 13.7	7	1.3	1 9 45	14.6	26.8	2 22.9	10 29	15.6	27.9	1 23.7	11 12	16.5	0	3.9	5 11	56	17.5	1									
48	6	3 7 34	1	4	0 4	1 8 16	0	5	2 21.7	8 59	13.9	6	1	5 9 42	14.9	7	2.9	3 10	25	15.8	28.8	8	1 11	9 40	8	0	3								
49	5 19.9	6 48	11.4	2	3 20.7	7 30	12.3	3	1	3 8 12	2	4	1.9	1 8 54	2	5	8 22.9	9 37	1	6	6 23.6	10 20	0	1.8											
50	3	5 6	0 10.6	0	2	2 6 41	11.5	1	0 20.9	7 23	12.5	2	8 21.6	8 5 13.4	3	6	4 8 47	14.4	4	4	1 9 29	15.3	6												
51	1	1 5 11	9.8	23.7	0 19.8	5 52	10 7	24.9	0.9	5 6 33	11.7	25.9	6	2 7 15	12.6	1	4 21.9	7 57	13.6	2	2 22.6	8 38	14.5	3											
52	28.9	18.6	4 21	8.9	4	29.9	3 5 1	9.8	6	7	0 5 41	10.8	6	4 20.7	6 22	11.7	26.8	2	3 7	3 12.7	0	0	1 7 0	13.6	1										
53	8	1 3 29	0	1	7 18.8	4 8 8	9	3	5 19.5	4 48	9.9	3	2	2 5 29	10.8	6	0 20	9 6	8 11	7 27.8	2 9 21	6	6 49	12 7	28.8										
54	6 17.6	2 35	7 0 22.8	5	3 3 14	7.9	0	3	0 3 53	8.9	1	1 19.7	4 33	9.8	3	1.9	4 5 12	10.7	5	7	1 5 8 2	11 7	6												
55	5	1 1 40	6.0	5	3 17.8	2 18	6.9	23.7	1 18.5	2 56	7.8	24.8	0.9	2 3 35	8.7	0	7 19.9	4 44	9.6	2	5 20	5 4 53	10 6	3											
56	3 16.6	0 42	4.9	2	1	3 1 20	5.7	4	2 9.9	17.9	1 58	6.6	5	6 18.6	2 36	7.5	25.7	5	3 3 14	8 4 26.8	3 19.9	3 52	9.4	0											

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.						H. M. S.						H. M. S.						H. M. S.								
SID. T. 12 25 42 } $\Delta$ 7°						12 29 23 } $\Delta$ 8°						12 33 4 } $\Delta$ 9°						12 36 45 } $\Delta$ 10°								
ARC 186° 25'.6 } 7°						187° 20'.8 }						188° 16'.0 }						189° 11'.3 }								
11	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	
Lat.	m	°	°	°	°	m	°	°	°	°	m	°	°	°	°	m	°	°	°	°	m	°	°	°	°	
22	6.9	2.6	26	40	28.5	3.1	7.8	3.5	27	29	29.4	4.1	8.7	4.3	28	20	0.4	5.1	9.6	5.1	29	10	1.3	6.2	10.5	
23	8	4	26	11	2	0	7	2	27	1	1	0	6	0	27	52	1	1	5	4.8	28	42	0	1	4	
24	7	1	25	43	27.9	2.9	6	2.9	26	33	28.8	0	5	3.7	27	23	29.8	0	4	6	28	13	0.7	0	3	
25	6	1.8	25	14	6	8	5	6	26	4	5	3.9	4	5	26	54	5	4.9	3	3	27	44	4	0	1	
26	5	5	24	45	3	7	7.4	4	25	34	2	8	8.3	2	26	24	1	8	1	0	27	14	1	5.9	0	
27	6.4	3	24	15	26.9	7	3	1	25	4	27.9	7	2	2.9	25	54	28.8	7	0	3.7	26	44	29.8	8	9.9	
28	3	0	23	45	6	2.6	2	1.8	24	34	5	6	0	6	25	24	5	7	8.9	4	26	14	5	7	8	
29	2	0.7	23	14	3	5	1	5	24	3	2	5	7.9	3	24	53	2	4.6	8	1	25	42	1	6	7	
30	1	4	22	43	25.9	4	6.9	2	23	32	26.9	3.4	8	0	24	21	27.8	5	7	2.8	25	11	28.8	5	6.6	
31	0	1	22	11	6	3	8	0.9	23	0	5	3	7	1	23	49	5	4	6	5	24	38	4	5	10.3	
	m																									
32	5.8	29.8	21	38	2	2.2	7	6	22	27	1	2	6	4	23	16	1	3	5	2	24	5	1	3	9.4	
33	7	5	21	5	24.8	1	6	3	21	54	25.8	1	5	1	22	43	26.7	4.2	8.4	1.9	23	32	27.7	2	2	
34	6	2	20	32	4	0	5	0	21	20	4	0	7.4	0.8	22	9	3	1	2	6	22	57	3	1	1	
35	5	28.8	19	57	0	1.9	6.4	29.6	20	45	24.9	2.9	2	4	21	34	25.9	0	1	2	22	22	26.9	0	0	
36	5.4	5	19	22	23.5	7	3	3	20	10	5	8	1	1	20	58	5	3.9	0	0	9.21	47	5	4.9	8.9	
37	3	2	18	47	1	6	1	0	19	34	1	7	m	0	29.8	20	21	0	8	7.9	6	21	10	0	8	7
38	1	27.8	18	10	22.6	5	0	28.6	18	57	23.6	6	6.9	4	19	45	24.6	6	7	2	20	32	25.6	7	6	0
39	0	5	17	32	1	1.4	5.9	3	18	19	1	2.4	7	1	19	7	1	5	6	29.8	19	54	1	6	5	
40	4.9	2	16	54	21.6	2	7	27.9	17	41	22.6	3	6	28.7	18	28	23.6	3.4	5	5	19	15	24.6	5	8.3	
41	8	26.9	16	15	1	1	6	5	17	1	1	2	5	3	17	48	1	3	7.3	1	18	34	1	4.4	2	
42	6	5	15	34	20.6	0.9	5	2	16	21	21.5	0	6.3	27.9	17	7	22.5	1	2	28.7	17	53	23.6	3	0	5
43	5	1	14	53	0	8	5.3	26.8	15	39	0	1.9	2	5	16	25	21.9	0	0	3	17	11	0	2	7.9	
44	4.3	25.7	14	10	19.4	6	2	4	14	56	20.4	7	0	1	15	41	3	2.9	6.9	27.9	16	27	22.4	1	1	6
45	2	3	13	27	18.8	5	0	0	14	12	19.8	6	5.9	26.7	14	57	20.7	8	7	5	15	42	21.8	3.9	5	2
46	0	24.9	12	42	1	0.3	4.9	25.5	13	27	1	5	7	3	14	12	1	6	5	0	14	56	2	7	4	27.8
47	3.9	5	11	56	17.5	1	8	1	12	40	18.4	3	6	25.9	13	25	19.4	4	4	26.6	14	9	20.5	5	3	4
48	8	1	11	9	16.8	0	7	24.7	11	52	17.7	1	5	5	12	37	18.7	2	2	2	13	20	19.8	3	1	0
49	6	23.6	10	20	0	29.8	5	3	11	3	0	0.9	3	0	11	47	0	1	1	25.8	12	30	1	2	6.9	
50	4	1	9	29	15.3	6	3	23.8	10	12	16.3	7	1	24.5	10	55	17.3	1.9	5.9	3	11	38	18.3	0	7	0
51	2	22.6	8	38	14.5	3	1	3	9	20	15.5	5	4.9	0	10	2	16.5	6	7	24.8	10	44	17.5	2.8	5	25.5
52	0	1	7	44	13.6	1	3.9	22.8	8	26	14.6	2	7	23.5	9	7	15.6	4	6	3	9	49	16.6	6	3	0
53	2.9	21.6	6	49	12.7	28.8	7	3	7	30	13.6	0	5	0	8	10	14.6	2	4	23.8	8	52	15.6	3	2	24.5
54	7	1	5	52	11.7	6	5	21.8	6	32	12.6	29.8	3	22.5	7	12	13.6	0.9	2	2	7	53	14.5	1	0	23.9
55	5	20.5	4	53	10.6	3	3	2	5	32	11.5	5	1	21.9	6	12	12.5	7	0	22.6	6	51	13.4	1.9	5.8	3
56	3	19.9	3	52	9.4	0	1	20.6	4	31	10.3	3	3.8	3	5	10	11.3	5	4.7	0	5	48	12.2	7	522.7	0

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.												H. M. S.												H. M. S.												H. M. S.											
SID. T. 12 47 50						12 51 32						12 55 14						12 58 57						13 2 40						13 6 23																	
ARC 191° 57'.5						192° 53'.0						193° 48'.6						194° 44'.3						195° 40'.0						196° 35'.9																	
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3						
Lat.	m	°	°	°	°	m	°	°	°	°	°	m	°	°	°	°	°	m	°	°	°	°	°	m	°	°	°	°	°	m	°	°	°	°	°	m	°	°	°	°	°						
22	12.3	7.6	143	4.2	9.3	13.1	8.4	234	5.2	10.3	14.0	9.3	326	6.1	11.4	14.9	10.1	418	7.1	12.4	15.8	11.0	510	8.1	13.5	16.7	11.8	6	1	9.1	14.6																
23	1	1	3	114	3.9	2	0	2	2	5	4.9	3	13.9	0	257	5.9	3	8	9.8	349	6.8	4	7	10.7	441	7.8	4	6	5	533	8.8	5															
24	0	0	0	45	6	2	12.9	7.9	136	6	2	8	8.7	228	6	3	7	6	319	6	3	6	4	411	5	4	5	2	53	6	5																
25	11.9	6.8	016	3	1	8	6	1	7	3	1	7	4	158	3	2	6	3	250	3	3	5	1	341	2	3	4	10.9	433	3	4																
26	8	5	2946	0	0	7	3	036	0	1	6	1	128	0	11.1	5	0	219	0	2	15.4	9.8	311	6.9	3	16.3	6	43	0	144																	
27	7	2	2915	2.7	0	6	0	0	6	3.7	0	5	7.8	057	4.7	1	14.4	8.7	149	5.7	12.2	2	5	240	6	13.2	1	3	332	7.7	3																
28	6	5.9	2844	4	8.9	5	6.7	2935	3	9.9	13.4	5	026	3	0	2	3	117	3	1	1	2	29	3	2	0	0	30	4	3																	
29	5	6	2812	0	8	12.4	429	3	0	9	2	2	229	54	0	10.9	1	0	045	0	0	0	8.8	137	0	1	15.9	9.7	228	1	2																
30	11.4	2	2740	1.7	7	2	12831	2.7	8	1	6.9	2922	3.7	9	0	7.7	013	4.7	0	14.9	5	14	5.7	0	8	3	155	6.7	14.1																		
31	2	4.9	278	4	6	1	5.7	2758	4	7	0	62849	4	8	13.9	42940	4	11.9	7	2	031	4	0	6	0	122	4	1																			
32	1	62634	0	8.6	0	4	2724	0	6	12.9	22815	0	7	7	129	6	0	8	6	7.9	2957	0	12.9	5	8.7	048	1	0																			
33	0	3260	0.6	511.9	1	2650	1.6	9.6	7	5.9	2740	2.6	7	6	6.7	2831	3.7	7	5	52922	4.7	8	15.4	3013	5.7	13.9																					
34	10.9	02525	2	4	7	4.8	2615	2	5	6	6275	210.6	5	42755	3	7	14.4	22846	3	8	2	02937	3	9																							
35	7	3.6	2449	29.8	3	6	42539	0.8	4	5	22628	1.8	5	13.3	02719	2.9	11.6	2	6.8	289	3.9	7	1	7.6	290	4.9	8																				
36	6	32413	4	8.2	5	1252	4	3	12.3	4.9	2551	4	4	2	5.7	2641	5	5	1	52732	512.6	14.9	32822	5	7																						
37	5	2.9	2335	0	111.3	3.7	2424	0	9.2	2	52514	0	3	1	3263	0	4	13.9	12654	1	5	8	6.9	2744	1	7																					
38	10.3	62257	28.6	1	2	42346	29.5	1	1	1	22435	0.5	10.3	12.9	02524	1.6	3	8	5.7	2615	2.6	5	6	5274	3713.6																						
39	2	22218	1	0	0	0236	1	0	0	11.9	3.8	2355	1	2	8	4.6	2444	1	11.2	6	42534	2	4	5	22624	2	6																				
40	0	1.8	2138	27.6	7.9	10.9	2.6	2226	28.6	0	7	42315	29.6	1	6	2244	0.6	2	5	02453	1.7	12.3	14.3	5.8	2542	2.7	5																				
41	9.9	42057	0	8	7	22144	0	8.9	6	02233	1	0	4	3.8	2322	1	1	13.3	4.6	2411	1	2	2	4250	2	4																					
42	7	02014	26.5	7	6	1.8	2127.5	8	4	2.6	2150	28.5	9.9	3	5	42238	29.6	0	1	22327	0.6	1	0	4.9	2416	1.7	13.3																				
43	6	0.6	1931	0	5	4	42018	0	7	3	2216	0	8	1	02154	0	10.9	0	3.7	2242	0	0	13.8	52331	1	2																					
44	4	21846	25.4	7.4	10.3	01933	26.4	5	1	1.7	2020	27.4	7	11.9	2.5	21828.4	8	12.8	32155	29.4	11.9	6	12244	0.5	1																						
45	229.7	18	024.8	3	1	0.5	1846	25.8	8.4	10.9	31933	26.8	6	8	12020	27.8	7	6	2.8	21728.8	8	4	3.6	215629.9	0																						
46	0	31713	1	1	0	1	1758	2	3	7	0.9	1844	2	9.4	7	1.6	1931	2	6	4	42018	2	7	3	2216	6	312.9																				
47	8.9	28.8	1624	23.4	0	9.8	29.6	17	9.24.5	1	6	51755	25.6	3	5	21841	26.6	10.5	3	1.9	1927	27.6	6	1	2720	1428.7	8																				
48	8	41534	22.8	6.9	6	21618	23.8	0	4	0.17	324.9	2	3	0.7	1749	25.9	3	1	41835	26.9	5	12.9	21921	1	7																						
49	6	01442	1	7	428.7	1525	1	7.9	229.5	1611	2	0	1	21655	1	2	11.9	0.9	1741	2	11.4	7	171827.74	6																							
50	4	27.5	1348	21.3	5	2	21431	22.3	7	1	01516	23.4	8.9	10.9	29.7	16024.4	1	7	41645	25.5	3	5	21731	26.6	12.5																						
51	2	01252	20.5	3	0	27.7	1336	21.5	5	9.9	28.5	141922.6	7	7	2153	23.6	9.9	5	29.9	1548	24.7	1	3	0.6	1632	25.8	4																				
52	0	26.5	1155	19.6	1	8.8	21238	20.6	3	7	27.9	1320	21.7	6	5	28.6	14	422.7	8	3	31445	23.8	0	0	01532	24.9	2																				
53	7.8	25.9	1055	18.6	5.9	6	26.6	1138	19.6	1	4	31220	20.7	4	2	013	321.7	6	1	28.7	1346	22.7	10.8	11.8	29.4	142923.9	0																				
54	6	3	954	17.5	8	4	01036	18.6	0	2	26.7	1117	19.6	2	0	27.4	1159	20.7	4	10.9	11242	21.7	7	6	28.8	1322.8	11.9																				
55	4	24.7	851	16.4	6	225.4	932	17.5	6.8	0	11013	18.5	0	9.8	26.8	1054	19.6	2	6	27.5	1135	20.6	5	4	21216	21.7	7																				
56	1	1	746	15.1	4	7.9	24.8	825	16.3	5	8.7	25.5</																																			

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.																	
SID. T. 13 6 23 } $\Delta$					13 10 7 } $\Delta$ 19°					13 13 51 } $\Delta$ 20°					13 17 36 } $\Delta$ 21°					13 21 21 } $\Delta$ 22°																	
ARC 196° 35'.9 } 18°					197° 31'.8 }					198° 27'.8 }					199° 24'.0 }					200° 20'.2 }																	
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3												
Lat.	m	°	'	"	X	m	°	'	"	X	m	°	'	"	X	m	°	'	"	X	m	°	'	"	X												
22	16.7	11.8	6	1	9.1	14.6	17.6	12.6	6	54	10.1	15.6	18.5	13.5	7	47	11.1	16.7	19.4	14.3	8	41	12.1	17.8	20.3	15.1	9	34	13.2	18.8	21.2	16.0	10	28	14.2	19.9	
23	6	5	5	33	8.8	5	5	3	6	26	9.8	6	4	2	7	18	10.8	6	3	0	8	12	11.9	7	2	14.8	9	5	12.9	8	1	15.7	9	59	13.9	9	
24	5	2	5	3	6	5	4	0	5	56	6	5	3	12.9	6	49	6	6	1	13.7	7	42	6	7	0	5	8	35	6	8	20.9	4	9	29	7	9	
25	4	10.9	4	33	3	4	3	11.7	5	26	3	5	1	6	6	19	3	6	0	4	7	12	3	7	19.9	2	8	5	3	7	8	1	8	59	4	8	
26	16.3	6	4	3	0	14.4	1	4	4	56	0	4	0	3	5	48	0	5	18.9	1	6	41	0	6	8	13.9	7	35	1	7	7	14.8	8	28	1	8	
27	1	3	3	32	7.7	3	0	1	4	25	8.7	15.4	17.9	0	5	17	9.7	16.5	8	12.8	6	10	10.7	17.6	7	6	7	3	11.8	18.7	5	5	7	57	12.8	19.8	
28	0	0	3	0	4	3	16.9	10.8	3	53	4	3	8	11.6	4	45	4	4	6	5	5	38	4	5	5	3	6	31	5	6	20.4	1	7	25	5	7	
29	15.9	9.7	2	28	1	2	8	5	3	21	1	3	6	3	4	13	1	4	5	2	5	6	1	5	19.4	0	5	59	2	6	3	13.8	6	52	2	7	
30	8	3	1	55	6.7	14.1	6	2	2	48	7.8	2	5	0	3	40	8.8	3	18.4	11.8	4	33	9.8	4	3	12.7	5	25	10.9	5	1	5	6	19	11.9	6	
31	6	0	1	22	4	1	5	9.8	2	14	4	15.2	17.4	10.7	3	6	5	3	3	5	359	5	4	1	3	4	51	6	5	0	1	5	44	6	6		
32	5	8.7	0	48	1	0	16.4	5	140	1	1	3	3	2	31	1	16.2	1	2	3	24	2	17.3	0	0	4	16	2	18.4	19.9	12.8	5	10	3	19.6		
33	15.4	3	0	13	5.7	13.9	2	2	1	4	6.7	0	1	0	1	56	7.8	2	0	10.8	2	48	8.8	3	18.9	11.6	3	41	9.9	4	7	4	4	34	10.9	5	
34	2	0	29	37	3	9	1	8.8	0	28	4	0	0	9.6	1	20	4	1	17.8	5	2	12	5	2	7	3	3	4	5	3	6	1	3	57	6	5	
35	1	7.6	29	0	4.9	8	0	5	29	51	0	14.9	16.8	3	0	43	0	0	7	1	135	1	2	6	10.9	2	27	1	3	4	11.7	3	20	2	4		
36	14.9	3	28	22	5	7	15.8	1	29	13	5.6	9	7	8.9	0	5	6.6	0	5	9.7	0	56	7.7	17.1	4	5	1	48	8.7	2	19.3	3	241	9.8	19.4		
37	8	6.9	27	44	1	7	7.7	28	35	2	8	5	5	29	26	2	15.9	4	3	0	17	3	1	3	1	1	9	3	18.2	1	0	2	1	4	3		
38	6	5	27	4	3.7	13.6	5	3	27	55	4.7	7	4	2	28	46	5.8	8	2	8.9	29	37	6.8	0	1	9.7	0	29	7.9	1	0	10.6	1	21	0	3	
39	5	2	26	24	2	6	3	0	27	14	3	6	2	7.8	28	5	3	8	1	5	28	56	4	0	17.9	3	29	47	5	1	18.8	2	0	39	8.5	2	
40	14.3	5.8	25	42	2.7	5	2	6.6	26	33	3.8	14.6	0	4	27	23	4.9	7	16.9	1	28	13	5.9	16.9	8	8.9	29	4	0	0	6	9.7	29	56	1	19.2	
41	2	4	25	0	2	4	0	2	25	50	3	5	15.9	6.9	26	39	4	6	7	7	27	30	4	9	6	5	28	20	6.5	17.9	4	3	29	12	7.6	1	
42	0	4.9	24	16	1.7	13.3	14.8	5.7	25	5	2.7	4	7	5	25	55	3.9	15.5	5	3	26	45	4.9	8	4	1	27	35	0	9	3	8.9	28	26	1	0	
43	13.8	5	23	31	1	2	7	3	24	20	2	4	5	1	25	9	4	5	4	6.9	25	58	4	7	2	7.6	26	48	5.5	8	1	4	27	39	6.6	0	
44	6	1	22	44	0.5	1	5	4.8	23	32	1.6	14.3	3	5.6	24	21	2.8	4	2	4	25	10	3.9	16.6	0	2	26	0	0	8	17.9	7.9	26	50	0	18.9	
45	4	3.6	21	56	29.9	0	3	4	22	44	0	2	2	2	23	32	2	4	0	5.9	24	21	3	6	16.8	6.7	25	10	4.4	7	7	5	26	0	5.5	8	
46	3	2	21	6	3	12.9	2	3.9	21	54	0.4	1	0	4	7	22	42	1.6	15.3	15.8	4	23	30	2.7	5	7	2	24	19	3.8	17.7	5	0	25	8	4.9	8
47	1	2.7	20	14	28.7	8	0	4	21	2	29.7	0	14.8	2	21	49	0	2	6	4.9	22	37	1	4	5	5.8	23	26	2	6	3	6.5	24	15	3	7	
48	12.9	2	19	21	1	7	13.8	2.9	20	8	1	13.9	6	3.7	20	55	0.3	1	4	4	21	43	1.4	16.3	3	3	22	31	2.5	5	1	0	23	19	3.6	18.7	
49	7	1.7	18	27	27.4	6	6	4	19	13	28.4	8	4	2	20	0	29.6	0	2	3.9	20	47	0.7	2	1	4.7	21	34	1.8	4	16.9	5.5	22	22	2.9	6	
50	5	2	17	31	26.6	12.5	4	1.9	18	16	27.7	7	2	2.7	19	2	28.8	14.9	0	4	19	48	29.9	1	15.9	2	20	35	0	17.3	7	4.9	21	22	2	5	
51	3	0.6	16	32	25.8	4	2	3	17	17	26.9	6	13.9	1	18	2	0	8	14.8	2.8	18	48	1	0	7	3.6	19	34	0.2	2	4	3	20	20	1.4	4	
52	0	0	15	32	24.9	2	12.9	0.7	16	16	0	13.4	7	1.5	17	0	27.1	7	5	2	17	45	28.2	15.8	4	0	18	30	29.3	1	1	3.7	19	16	0.5	18.3	
53	11.8	29.4	14	29	23.9	0	7	1	15	12	25.0	3	5	0.9	15	56	26.1	5	3	1.6	16	40	27.2	7	2	2.4	17	25	28.3	0	15.9	1	18	10	29.5	2	
54	6	28.8	13	24	22.8	11.9	5	29.5	14	6	23.9	1	3	3	3	14	49	25.1	14.4	0	0	15	33	26.2	6	14.9	1.8	16	16	27.3	16.9	7	2.5	17	1	28.5	2
55	4	2	12	16	21.7	7	2	28.9	12	58	22.8	0	0	29.7	13	40	24.0	2	13.8	0.4	14	23	25.1	5	6	1	15	6	26.2	8	4	1.8	15	49	27.4	1	
56	1	27.5	11	6	20.4	6	11.9	2	11	47	21.5	12.9	12.7	0	12	28	22.7	1	5	29.7	13	10	23.8	3	3	0.4	13	52	25.0	7	1	1	14	34	26.2	0	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

SID. T. 13 28 52						13 32 38						13 36 25						13 40 13						13 44 0																
ARC 202° 13'.0						203° 9'.6						204° 6'.3						205° 3'.2						206° 0'.1						206° 57'.2										
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3											
Lat.	m	s	m	s	m	m	s	m	s	m	m	m	s	m	s	m	m	s	m	s	m	m	s	m	s	m	m	s	m	s	m									
22	22.1	16.8	11	22	15.2	21.0	23.0	17.7	12	16	16.3	22.1	23.9	18.5	13	11	17.3	23.2	24.7	19.4	14	6	18.4	24.3	25.6	20.3	15	2	19.4	25.4	26.5									
23	21.9	5	10	53	0	0	22.8	4	11	47	0	1	7	2	12	42	1	2	6	1	13	37	1	3	5	0	14	33	2	4	4	20.5	15	29	3	5				
24	8	2	10	23	14.7	20.9	7	1	11	18	15.8	1	6	17.9	12	12	16.8	1	5	18.8	13	7	17.9	2	4	19.6	14	3	18.9	4	3	5	14	59	0	5				
25	7	15.9	9	53	4	9	6	16.8	10	47	5	0	5	6	11	42	6	1	4	5	12	37	6	2	2	3	13	33	7	4	1	2	14	29	19.8	4				
26	6	6	9	22	2	9	4	5	10	17	2	0	23.3	3	11	11	3	1	2	2	12	6	4	2	1	0	13	2	4	3	0	19.9	13	58	5	4				
27	21.4	3	8	51	13.9	9	22.3	1	9	45	0	0	2	0	10	40	0	23.1	1	17.8	11	35	1	24.2	0	18.7	12	31	2	25.3	25.9	5	13	26	3	26.4				
28	3	0	8	19	6	8	2	15.8	9	13	14.7	21.9	1	16.7	10	8	15.7	1	23.9	5	11	3	16.8	2	24.8	4	11	58	17.9	3	7	2	12	54	0	4				
29	21.4	6	7	46	3	20.8	0	5	8	40	4	9	22.9	3	9	35	4	0	8	2	10	30	5	1	7	0	11	25	6	3	6	18.9	12	21	18.7	4				
30	0	3	7	12	0	8	21.9	2	8	7	1	9	8	0	9	1	1	0	7	16.8	9	56	2	1	5	17.7	10	51	3	3	4	5	11	47	4	4				
31	20.9	0	6	33	12.7	7	8	14.8	7	32	13.8	8	6	15.7	8	27	14.8	0	5	5	9	22	15.9	24.1	4	3	10	17	0	25.2	25.3	2	11	13	1	4				
32	7	13.6	6	3	3	7	6	5	6	57	4	8	5	3	7	51	5	22.9	23.4	1	8	46	6	1	24.3	0	9	41	16.7	2	1	17.8	10	37	17.8	26.4				
33	6	3	5	27	0	6	5	1	6	21	1	21.8	22.4	14.9	7	15	2	9	2	15.8	8	10	3	1	1	16.6	9	5	4	2	0	4	10	1	5	3				
34	4	12.9	4	50	11.7	20.6	21.3	13.8	5	44	12.8	7	2	6	6	38	13.9	9	1	4	7	33	0	0	0	2	8	28	1	2	24	8	1	9	23	2	3			
35	20.3	6	4	13	3	6	2	4	5	6	4	7	1	2	6	0	5	8	22.9	0	6	55	14.6	24.0	23.8	15.9	7	49	15.7	25.2	7	16.7	5	45	16.8	3				
36	1	2	3	34	10.9	5	0	0	4	27	0	7	21.9	13.8	5	21	1	8	8	14.6	6	16	2	0	6	5	7	10	3	1	5	3	8	5	3					
37	0	11.8	2	54	5	5	20.9	12.6	3	47	11.6	6	7	4	4	41	12.7	22.8	6	2	5	35	13.8	0	5	1	6	30	0	1	3	15.9	7	25	1	26.3				
38	19.8	4	2	13	1	4	7	2	3	6	2	21.6	6	0	4	0	3	7	4	13.8	4	54	4	0	3	14.7	5	48	14.6	1	2	5	64	3	15.7	3				
39	7	0	1	31	9.6	20.4	5	11.8	2	24	10.8	5	4	12.6	3	17	11.9	7	2	4	4	11	0	23.9	1	2	5	5	2	25.1	0	1	5	59	4	2				
40	5	10.6	0	48	2	4	4	4	1	40	4	5	2	2	2	33	5	7	1	0	3	27	12.6	9	22.9	13.8	4	20	13.8	0	23.8	14.6	5	15	0	2				
41	3	1	0	3	8.7	4	3	10.9	0	55	9.9	4	0	11.7	1	48	0	6	21.9	12.5	241	1	9	7	4	335	4	0	6	2	4	29	14	6	2					
42	1	9.7	2	9	17	2	3	1	5	0	9	4	4	20.8	3	1	1	10.5	22.6	7	1	154	11.6	9	5	12.9	2	48	12.9	0	4	13.7	3	41	1	26.2				
43	18.9	2	28	30	7.7	3	19.9	0	29	21	8.9	21.3	6	10.8	0	13	0	5	5	11.6	1	5	1	8	3	4	159	4	24.9	2	3	252	13	6	2					
44	7	8.7	2	7	41	1	20.2	7	9.5	28	32	4	3	4	3	29	23	9.5	5	3	1	0	15	10.6	23.8	1	11.9	1	8	11.9	9	0	12.5	2	1	1	1			
45	5	3	26	50	6.5	1	5	1	27	41	7.8	2	2	9.8	28	32	8.9	5	1	10.6	29	24	1	8	21.9	4	0	16	4	9	22.8	3	1	9	12.6	1				
46	3	7.8	25	58	0	1	3	8.6	26	48	2	2	0	3	27	39	3	4	20.8	1	28	30	9.5	7	7	10	9	29	22	10.8	8	6	11.8	0	14	0	1			
47	1	3	25	4	5.4	0	1	0	25	54	6.6	21.1	19.8	8.8	26	44	7.7	22.4	6	9.6	27	34	8.9	7	6	4	28	26	2	8	4	2	29	18	11	4	26	1		
48	17.9	6.8	24	8	4.7	19.9	18.9	7.5	24	57	5.9	1	6	3	25	47	1	4	4	1	26	37	3	23.6	4	9	9	27	28	9	6	24	8	2	10.7	28	19	10	8	0
49	7	3	23	10	0	9	7	6.9	23	58	2	0	4	7.8	24	48	6.4	3	2	8.6	25	37	7.6	6	2	3	26	27	8.9	7	21.9	1	27	18	1	0				
50	5	5.7	22	10	3.3	8	4	4	22	58	4.5	0	2	2	23	46	5.7	3	0	0	24	35	6.9	5	20.9	8.7	25	25	2	7	7	9.5	26	14	9.4	0				
51	2	1	21	7	2.5	7	2	5.8	21	55	3.7	20.9	18.9	6.6	22	42	4.9	22	2	19	7	7.4	23	31	1	5	6	1	24	20	7.4	6	4	8.9	25	9	8	7	25	9
52	0	4.5	20	2	1.6	19.6	17.9	2	20	49	2.8	9	7	0	21	36	1	1	4	6.8	22	24	5.3	23.4	3	7	5	23	12	6.6	24	6	1	3	24	0	7.9	9		
53	16.8	3.9	18	55	0.7	5	6	4.6	19	41	1.9	8	5	5.4	20	27	3.2	1	2	1	21	14	4.4	3	1	6	5	22	1	5.7	5	20.9	7	6	22	49	0	9		
54	5	2	17	45	29.7	4	3	3.9	18	30	0.9	7	2	4	7.7	19	16	2.2	0	0	5.4	20	1	3.4	3	19.8	1	20	45	4.7	5	6	6.9	21	35	6.0	8			
55	2	2.5	16	32	28.6	3	0	2	17	17	29.8	6	17.9	0	18	1	1.1	21	9	18.7	4.7	18	46	2.3	2	5	5	4	19	31	3.6	5	3	2	20	17	4.9	8		
56	15.9	1.8	15	17	27.4	2	16.7	2.5	16	0	28.6	4	5	3.3	16	43	29.9	8	3	0	17	27	1.1	1	1	4.7	18	12	2.4	4	0	5.4	15	56	3.7	8				

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

SID. T.	H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.											
	13	47	49	13	51	38	13	55	27	13	59	18	14	3	8	14	7	0	11	12	1	2	3	11	12	1	2	3				
ARC	206° 57' 2					207° 54' 5					208° 51' 9					209° 49' 4					210° 47' 1					211° 44' 9						
Lat.	m	1	2	3	m	1	2	3	m	1	2	3	m	1	2	3	m	1	2	3	m	1	2	3	m	1	2	3				
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					
22	26.5	21.1	15.58	20.5	26.5	27.4	22.0	16.54	21.6	27.6	28.3	22.8	17.51	22.7	28.7	29.2	23.7	18.48	23.8	29.8	0.1	24.6	19.46	24.9	0.9	1.0	25.4	20.44	25.9	2.0		
23	4	20.8	15.29	3	5	3	21.7	16.25	3	6	2	5	17.22	4	7	1	4	18.19	5	8	0	3	19.17	7	9	0.9	1	20.15	7	0		
24	3	5	14.59	0	5	2	4	15.56	1	6	1	2	16.52	2	7	0	1	17.50	3	8	29.8	0	18.48	4	9	7	24.8	19.46	5	0		
25	1	2	14.29	19.8	4	0	0	15.25	20.9	6	27.9	21.9	16.22	0	7	28.8	22.8	17.20	1	8	7	23.6	18.17	2	9	6	5	19.16	3	0		
26	0	19.9	13.58	5	4	26.9	20.7	14.54	6	6	8	6	15.51	21.7	7	7	4	16.49	22.9	8	6	3	17.47	0	9	5	2	18.45	1	0		
27	25.9	5	13.26	3	26.4	7	4	14.23	4	27.5	6	3	15.20	5	28.7	5	1	16.17	6	29.8	4	0	17.15	23.7	0.9	0.3	23.8	18.13	24.9	2.1		
28	7	2	12.54	0	4	6	1	13.51	1	5	5	20.9	14.47	2	7	4	21.8	15.45	3	8	29.3	22.6	16.43	5	9	2	5	17.41	6	1		
29	6	18.9	12.21	18.7	4	5	19.7	13.17	19.8	5	27.3	6	14.14	0	7	2	4	15.12	1	8	1	3	16.9	2	9	0	2	17.8	4	1		
30	4	5	11.47	4	4	26.3	4	12.44	6	5	2	2	13.40	20.7	7	1	1	14.38	21.8	8	0	21.9	15.35	0	9	29.9	22.8	16.34	1	1		
31	25.3	2	11.13	1	4	2	0	12.9	3	5	0	19.9	13.6	4	6	27.9	20.7	14.3	5	8	28.8	6	15.1	22.7	0.9	7	5	15.59	23.8	1		
32	1	17.8	10.37	17.8	26.4	0	18.7	11.33	18.9	27.5	26.9	5	12.30	1	28.6	8	4	13.27	2	29.8	7	2	14.25	4	9	5	1	15.23	6	2.1		
33	0	4	10.1	5	3	25.9	3	10.57	6	5	7	1	11.53	19.8	6	6	0	12.50	20.9	8	5	20.8	13.48	1	9	4	21.7	14.46	3	1		
34	24.8	1	9.23	2	3	7	17.9	10.19	3	5	6	18.8	11.16	5	6	5	19.6	12.13	6	8	3	5	13.10	21.8	9	2	3	14.9	0	1		
35	7	16.7	8.45	16.8	3	5	5	9.41	0	5	4	4	10.37	1	6	3	2	11.34	3	8	2	1	12.32	5	1.0	0	20.9	13.30	22.7	1		
36	5	3	8.5	5	3	4	1	9.1	17.6	5	2	0	9.57	18.8	6	1	18.8	10.54	0	8	1	19.7	11.52	2	0	28.9	5	12.50	3	1		
37	3	15.9	7.25	1	26.3	3	16.7	8.20	2	27.4	1	17.6	9.16	4	28.6	26.9	4	10.13	19.6	29.8	27.9	3	11.10	20.8	0	7	1	12.8	0	2.2		
38	2	5	6.43	15.7	3	1	3	7.38	16.9	4	25.9	2	8.34	1	6	8	0	9.31	2	8	7	18.8	10.28	4	0	5	19.7	11.25	21.7	2		
39	0	1	5.59	4	2	24.9	15.9	6.54	5	4	7	16.7	7.50	17.7	6	6	17.6	8.47	18.9	8	5	4	9.44	1	0	3	3	10.41	4	2		
40	23.8	14.6	5.15	0	2	7	5	6.10	1	4	5	3	7.5	3	6	4	1	8.1	5	8	3	0	8.58	19.7	1.0	1	18.8	9.55	0	2		
41	6	2	4.29	14.6	2	5	0	5.23	15.7	4	3	15.8	6.19	16.9	6	2	16.7	7.15	1	8	1	17.5	8.11	3	0	27.9	4	9.8	20.6	2		
42	4	13.7	3.41	1	26.2	3	14.6	4.36	2	27.4	1	4	5.31	4	28.6	0	2	6.26	17.7	29.8	26.9	0	7.22	18.9	0	7	17.9	8.19	2	2.2		
43	2	3	2.52	13.6	2	1	1	3.46	14.7	4	24.9	14.9	4.41	15.9	6	25.8	15.7	5.36	2	8	7	16.5	6.32	5	0	5	4	7.29	19.8	2		
44	0	12.8	2.1	1	1	12.39	13.6	2.55	2	4	7	4	3.49	4	6	6	2	4.44	16.7	8	5	0	5.40	0	1.0	3	16.9	6.36	3	2		
45	22.8	3	1.9	12.6	1	7	1	2	2.13.7	3	5	13.9	2.56	14.9	5	3	14.7	3.50	2	8	3	15.5	4.46	17.5	0	1	3	5.42	18.8	2		
46	6	11.8	0.14	0	1	5	12.6	1	7	2	3	3	4	2	0	4	5	1	2	2.55	15.7	8	1	0	3.50	0	0	26.9	15.8	4.45	3	3
47	4	2	29.18	11.4	26.1	3	0	0.10	12.6	27.3	1	12.8	1	3	13.8	28.5	24.9	13.6	1.56	1	29.8	25.8	14.4	2	51	16.4	0	7	2	3.46	17.8	2.3
48	2	10.7	28.19	10.8	0	0	11.5	29.11	0	3	23.9	3	0	3	2	5	7	1	0.56	14.5	8	6	13.9	1.50	15.8	1.0	4	14.7	2.45	2	3	
49	21.9	1	27.18	1	0	22.8	10.9	28.9	11.4	3	7	11.7	29.1	12.6	5	5	12.5	29.53	i3.9	8	3	3	0.47	2	0	1	1	14.1	16.6	3		
50	7	9.5	26.14	9.4	0	5	3.27	5	10.7	2	4	1	27.56	11.9	5	2	11.9	28.48	2	8	0	12.7	29.41	14.5	0	25.9	13.5	0.34	15.9	3		
51	4	8.9	25.9	8.7	25.9	2	9.6	25.59	0	2	1	10.5	26.49	2	5	23.9	3.27	40	12.5	8	24.7	1	28.32	13.8	1	6	12.9	29.24	2	3		
52	1	3.24	0	7.9	9	21.9	0	24.49	9.2	27.2	22.8	9.9	25.39	10.4	28.5	6	10.6	26.29	11.7	29.8	4	11.4	27.20	0	1.1	3	228.12	14.4	2.3			
53	20.9	7.6	22.49	0	9	6	8.3	23.37	8.3	2	5	2	24.26	9.5	4	3	9.9	25.16	10.8	8	2	10.7	26.6	12.2	1	0	11.5	26.56	13.6	4		
54	6	6.9	21.35	6.0	8	4	7.6	22.22	7.3	1	2	8.5	23.10	8.5	4	0	2	23.58	9.9	8	23.9	0	24.48	11.3	1	24.7	10.7	25.37	12.7	4		
55	3	2.20	17	4.9	8	1	6.9	21.3	6.2	1	21.9	7.7	21.50	7.5	4	22.7	8.4	22.38	8.9	8	6	9.2	23.26	10.3	1	4	9.9	24.15	11.7	4		
56	0	5.4	18.56	3.7	8	20.8	1	19.42	5.0	1	5	6.9	20.27	6.4	4	3	7.6	21.14	7.8	8	2	8.4	22.1	9.2	1	0	1	22.48	10.6	4		

TABLE OF HOUSES FOR LATITUDES  $22^{\circ}$  TO  $56^{\circ}$ .

### UPPER MERIDIAN, CUSP OF 10th 11.

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Lat.	H. M. S. 14 10 52					H. M. S. 14 14 44					H. M. S. 14 18 37					H. M. S. 14 22 31					H. M. S. 14 26 26					H. M. S. 14 30 21					
	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	
22°	1.9	26.3	21.43	27.1	3.1	2.8	27.2	22.42	28.2	4.3	3.7	28.1	23.41	29.3	5.4	4.6	29.0	24.41	0.5	6.5	5.5	29.9	25.42	1.6	7.6	6.1	0.5	26.43	2.5	5.5	
23	8	0	21.14	26.9	2	7	26.9	22.13	0	3	6	27.8	23.13	2	4	5	28.7	24.13	3	5	4	6	25.13	4	7	3	5	26.14	6	8	
24	6	25.7	20.45	7	2	5	6	21.44	27.8	3	4	5	22.43	0	4	3	3	23.43	1	6	2	2	24.44	2	7	1	1	25.45	4	8	
25	5	4	20.14	5	2	4	3	21.14	6	3	3	1	22.13	28.8	4	2	0	23.14	29.9	6	1	28.9	24.14	0	7	0	29.8	25.16	2	9	
26	1.4	0	19.43	2	2	2	25.9	20.43	4	3	1	26.8	21.43	6	5	0	27.7	22.43	7	6	4.9	6	23.44	0.8	7.7	5.8	5	24.46	0	9	
27	2	24.7	19.12	0	3.2	1	6	20.11	2	4.3	0	5	21.11	3	5.5	3.9	4	22.12	5	6.6	8	3	23.13	6	8	7	1	24.15	1.8	9	
28	1	4	18.40	25.8	2	1.9	3	19.39	26.9	3	2.8	1	20.39	1	5	7	0	21.39	3	7	6	27.9	22.41	4	8	5	28.8	23.43	6	9.0	
29	0.9	0	18.7	5	2	8	24.9	19.6	7	4	7	25.8	20.6	6	27.9	5	6	26.7	21.7	0	7	5	6	22.8	2	8	4	5	23.10	4	0
30	7	23.7	17.33	3	2	6	6	18.32	4	4	5	4	19.32	6	5	4	3	20.33	28.8	7	4.3	2	21.34	0	7.9	2	1	22.36	2	0	
31	6	3	16.58	0	2	5	2	17.57	2	4	4	4	18.57	4	6	3	0	19.58	6	6.7	1	26.9	20.59	29.8	9	0	27.7	22.1	0	1	
32	4	0	16.22	24.7	3.3	1.3	23.8	17.22	25.9	4.4	2	24.7	18.22	1	5.6	1	25.6	19.22	3	8	0	5	20.23	5	9	4.9	4	21.25	0.7	1	
33	3	22.6	15.45	4	3	1	5	16.45	6	4	0	3	17.45	26.8	6	2.9	2	18.45	0	8	3.8	1	19.46	3	8.0	7	0	20.48	5	9.1	
34	1	2	15.7	1	3	0	1	16.7	3	5	1.9	23.9	17.7	5	6	8	24.8	18.7	27.8	8	6	25.7	19.8	0	0	5	26.6	20.10	2	2	
35	m	29.9	21.8	14.28	23.8	3	0.8	22.7	15.28	0	5	7	5	16.27	3	7	6	4	17.28	5	6.8	5	3	18.29	28.7	0	4	2	19.31	0	2
36	8	4	13.48	5	3	6	3	14.47	24.7	5	6	1	15.47	0	7	4	0	16.47	2	9	3	24.9	17.49	4	1	2	25.8	18.50	29.7	2	
37	6	0	13.6	2	3.3	4	21.8	14.6	4	4.5	4	22.7	15.5	25.7	5.7	2	23.6	16.5	0	9	1	5	17.7	2	1	0	4	18.9	5	3	
38	4	20.6	12.23	22.9	4	3	4	13.22	1	5	2	3	14.22	4	7	0	2	15.22	26.7	9	2.9	0	16.23	27.9	8.1	3.8	24.9	17.25	2	9.3	
39	2	1	11.39	6	4	1	0	12.38	23.7	6	0	21.8	13.37	1	8	1.8	22.7	14.37	3	7.0	7	23.6	15.38	6	2	6	5	16.40	28.9	4	
40	0	19.7	10.53	2	4	29.9	20.5	11.52	4	6	0.8	4	12.51	24.7	8	6	3	13.51	0	0	5	1	14.52	3	2	4	0	15.53	6	4	
41	28.8	2	10.6	21.8	4	7	1	11.4	0	6	6	20.9	12.3	3	8	4	21.8	13.3	25.6	0	3	22.6	14.4	0	3	2	23.5	15.5	3	5	
42	6	18.7	9.17	4	3.4	5	19.6	10.15	22.6	4.6	4	4	11.14	23.9	5.9	2	3	12.14	2	1	1	1	13.13	26.6	8.5	2.9	0	14.15	27.9	9.5	
43	4	2	8.26	0	4	3	1	9.24	2	6	2	19.9	10.23	5	9	0	20.8	11.22	24.8	1	1.8	21.6	12.22	2	4	7	22.5	13.22	5	6	
44	2	17.7	7.33	20.6	5	0	18.5	8.31	21.8	7	0	4	9.29	1	9	0.7	2	10.28	4	7.2	6	1	11.28	25.8	4	5	21.9	12.28	1	6	
45	0	2	6.38	1	5	28.8	0	7.35	4	7	29.8	18.8	8.33	22.7	9	5	19.7	9.32	0	2	4	20.5	10.31	4	5	2	4	11.31	26.7	7	
46	27.8	16.6	5.41	19.6	5	6	17.4	6.38	20.9	4.7	5	3	7.35	2	6.0	3	1	8.33	23.5	3	2	0	9.32	0	8.5	0	20.8	10.32	3	9.7	
47	5	1	4.41	1	3.5	4	16.9	5.38	4	7	3	17.7	6.35	21.7	0	0	18.5	7.32	0	3	0	19.4	8.31	21.5	5	1.8	2	9.31	25.8	8	
48	3	15.5	3.39	18.5	6	1	3	4.36	19.8	7	0	1	5.32	2	0	29.8	17.9	6.29	22.5	7.3	0	7	18.8	7.27	0	6	6	19.6	8.26	3	8
49	0	14.9	2.35	17.9	6	27.9	15.7	3.30	2	8	25.7	16.5	4.26	20.6	1	6	3	5.23	0	4	4	2	6.20	23.3	6	3	0	7.19	24.8	9	
50	26.7	3	1.28	2	6	6	1	2.22	18.6	4.8	4	15.9	3.18	0	1	3	16.7	4.14	21.4	4	1	17.5	5.11	22.8	8.7	0	18.4	6.8	2	10.0	
51	4	13.6	0.18	16.5	6	3	14.4	1.11	17.9	8	1	2	2.6	19.4	6.1	0	0	3.120.8	4	29.8	16.9	3.58	2	7	0	7.17	4.55	23.0	0		
52	1	12.9	2.9	4.15.8	3.6	26.9	13.7	29.57	2	9	27.8	14.5	0.51	18.7	2	28.6	15.3	1.46	1	7.5	5	2	24.1	21.5	8	3	0	3.37	22.9	1	
53	25.8	2	27.48	0	7	6	0.28	40.16.4	9	6	13.8	29.33	17.9	2	3	14.6	0.26	19.3	6	2.15	1	21.20.7	9	0	16.2	2.16	2	2			
54	5	11.5	26.28	14.1	7	3	12.3	27.19	15.5	5.0	3	0.28	11	0	3	0	13.8	29.3	3.184	7	28.9	14.6	29.57	19.9	9.0	7	15.4	0.51	21.4	10.3	
55	2	10.7	2.5	4.13.1	7	0	11.5	25.5	14.5	1	26.9	12.3	26.45	16.0	4	27.7	0.27	36.17.5	7	5	13.8	28.28	0	0	3	14.6	2.21	20.5	4		
56	24.8	9.9	23.36	12.0	7	25.6	10.7	24.25	13.4	1	5	11.5	25.15	11.9	5	3	12.2	26.5	16.5	8	1	0.26	56.18.0	1	8.9	13.8	27.48	10.5	5		

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

SID. T. 14 30 21				H. M. S. 14 34 17				H. M. S. 14 38 14				H. M. S. 14 42 11				H. M. S. 14 46 9				H. M. S. 14 50 8												
ARC. 217° 35'.3				218° 34'.3				219° 33'.4				220° 32'.8				221° 32'.3				222° 32'.0												
11	12	1	2	11	12	1	2	11	12	1	2	11	12	1	2	11	12	1	2	11	12	1	2									
Lat.	I	V	V	X	V	I	V	V	X	V	I	V	V	X	V	I	V	V	X	V	I	V	V	X								
22°	6.4	0.8	26.43	2.8	8.8	7.3	1.7	27.44	3.9	9.9	8.2	2.6	28.46	5.1	11.0	9.1	3.5	29.49	6.3	12.2	10.1	4.4	0.52	7.4	13.3							
23	3	5	26.14	6	8	2	4	27.16	7	9	1	3	28.18	4.9	1	0	2	29.21	1	2	9.9	1	0.25	3	4							
24	1	1	25.45	4	8	0	0	26.47	6	10.0	0	1.9	27.50	8	1	8.9	2.9	28.53	5.9	3	8	3.8	29.56	1	4							
25		I	29.8	25.16	2	9	6.9	0.7	26.18	4	0	7.8	6.27	20	6	1	7	5.28	24	8	3	6	4.29	27	0	4						
26	5.8	5	24.46	0	9	7	4	25.48	2	0	7	3	26.50	4	2	6	2.27	54	6	3	5	1.28	57	6.8	5	4						
27	7	1	24.15	1.8	9	6	0	25.17	0	1	5	0.9	26.19	2	11.2	4	1.9	27.23	5	12.4	9.3	2.8	28.27	7	13.5	2	3.7					
28	5	28.8	23.43	6	9.0	I	29.7	24.45	2.8	1	3	6.25	48	0	3	2	5.26	51	3	4	1	4.27	55	5	6	0						
29	4	5	23.10	4	0	3	4	24.12	6	10.1	2	3	25.15	3.8	3	1	2.26	18	1	5	0	1.27	23	3	6	9.9						
30	2	1	22.36	2	0	1	0	23.38	4	2	0	0.29.9	24.41	6	4	7.9	0.8	25.45	4.9	5	8.8	1.7	26.49	1	7	7	2.6					
31	0	27.7	22.1	0	1	5.9	28.6	23.3	2	2	6.8	5.24	6	4	4	7	5.25	10	7	12.6	6	4.26	15	5.9	13.7	5						
32	4.9	4	21.25	0.7	1	8	3	22.27	0	3	7	2	23.31	2	11.4	6	1.24	35	5	6	5	0.25	39	7	8	4						
33	7	0	20.48	5	9.1	6	27.9	21.51	1.7	3	5	28.8	22.54	0	5	I	29.7	23.58	3	7	3	0.6	25	3	5	8	2					
34	5	26.6	20.10	2	2	4	5	21.13	5	10.3	3	4	22.16	2.8	5	2	3	23.20	0	7	1	2.24	25	3	9	0	1.25					
35	4	2	19.31	0	2	2	1	20.34	2	4	1	0	21.37	5	6	0	28.9	22.41	3.8	12.8	7.9	29.8	23.46	1	14.0	8.8	0.7					
36	2	25.8	18.50	29.7	2	1	26.7	19.53	0	4	5.9	27.6	20.56	3	11.6	6.8	5.22	1	6	8	7	4.23	5	4.9	0	6	3.24	11	2			
37	0	4	18.9	5	3	4.9	3	19.11	0.7	5	7	2	20.15	0	6	6	1.21	19	3	9	5	0.22	23	5	1	I	4.29.8	23.29	0			
38	3.8	24.9	17.23	2	9.3	7	25.8	18.28	4	5	5	26.7	19.31	1.8	7	4	27.6	20.35	0	9	3	28.5	21.40	4	1	2	4.22	46	5.7	3		
39	6	5	16.40	28.9	4	5	4	17.43	2	10.6	3	3	18.46	5	7	2	2	19.50	2.8	13.0	1	1.20	55	1	2	0	28.9	22.0	5	4		
40	4	0	15.53	6	4	3	24.9	16.56	29.9	6	1	25.8	17.59	2	11.8	0	26.7	19.3	5	0	6.9	27.6	20.8	3.9	14.3	7.8	4	21.13	2	5		
41	2	23.5	15.5	3	5	0	4	16.7	6	7	4.9	3	17.10	0.9	8	5.8	2	18.14	2	1	7	1	19.19	6	4	6.27.9	20.24	4.9	6			
42	2.9	0	14.15	27.9	9.5	3.8	23.9	15.17	3	7	7	24.8	16.20	6	9	6	25.6	17.23	1.9	2	5	26.5	18.28	3	4	4	4	19.34	6	15.6		
43	7	22.5	13.22	5	6	6	4	14.24	28.9	10.8	5	2	15.27	3	9	4	1	16.30	6	13.3	3	0	17.35	0	5	1	26.9	18.40	3	7		
44	5	21.9	12.28	1	6	4	22.8	13.29	5	8	2	23.7	14.32	0	12.0	1	24.6	15.35	3	4	0	25.5	16.39	2.7	5	6.9	4	17.45	0	8		
45	2	4	11.31	26.7	7	1	3	12.32	1	9	0	1	13.35	29.6	1	4.9	0	14.38	0	4	5.8	24.9	15.42	4	14.6	6	25.8	16.47	3.7	9		
46	0	20.8	10.32	3	9.7	2.9	21.7	11.33	27.7	9	3.8	22.6	12.35	2	2	7	23.4	13.37	0.6	5	6	3	14.41	0	7	4	2	15.46	4	16.0		
47	1.8	2	9.31	25.8	8	7	1	10.31	3	11.0	6	0	11.32	28.8	3	4	22.8	12.34	2	13.5	3	23.7	13.38	1.6	8	2	24.6	14.42	0	1		
48	6	19.6	8.26	3	8	4	20.5	9.26	26.8	1	3	21.4	10.27	3	12.4	2	21.1	29.7	6	0	1	12.32	2	9	5.9	0	13.35	2.6	2			
49	3	0	7.19	24.8	9	1	19.9	8.18	3	2	0	20.7	9.19	27.8	5	3.9	21.6	10.20	2	7	4.7	22.5	11.22	0.7	15.0	6	23.3	12.25	2	3		
50	0	18.4	6.8	2	10.0	1.8	2	7	7	25.7	3	2.7	0	8.7	2	5	6	20.9	9.7	28.7	8	4	21.8	10.9	2	1	3	22.6	11.12	1.7	16.4	
51	0.7	17.7	4.55	23.6	0	5	18.5	5.52	1	4	4	19.4	6.51	26.6	6	2	2	7.51	1	14.0	1	1	8.52	29.6	3	0	21.9	9.54	2	5		
52	3	0	3.37	22.9	1	2	17.8	4.34	24.5	11.5	1	18.7	5.32	0	12.7	2.9	19.5	6.31	27.5	1	3.8	20.4	7.32	0	4	4.6	2	8.33	0.6	7		
53	0	16.2	2.16	2	2	0.8	0	3.12	23.8	5	1.8	17.9	4	9.25.3	8	6	18.7	5.7	26.8	2	4	19.6	6	7	28.4	15.5	3	20.4	7	7	0	8
54	29.7	15.4	0.51	21.4	10.3	5	16.2	1.46	0	6	4	0	2.42	24.5	9	3	17.9	3.39	0	3	1	18.8	4.37	27.7	6	0	19.5	5.36	29.3	17.0		
55	3	14.6	29.21	20.5	4	2	15.4	0.15	22.1	7	0	16.2	1.10	23.6	13.1	1.9	0	2.6	25.2	4	2.7	17.9	3	3	26.9	7	3.6	18.7	4	1	28.5	1
56	28.9	13.8	27.48	19.5	5	29.8	14.5	28.40	21.1	9	0.6	15.3	29.34	22.6	3	5	16.1	0.28	24.2	5	3	0	124	25.9	9	1	17.8	2.20	27.6	3		

TABLE OF HOUSES FOR LATITUDES  $22^{\circ}$  TO  $56^{\circ}$ .

## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.						H. M. S.						H. M. S.						H. M. S.						H. M. S.															
SID. T. 14 54 7			m			14 58 7			m 17°			15 2 8			m 18°			15 6 10			m 19°			15 10 12			m 20°												
ARC 223° 31' 8						16°						224° 31' 9						225° 32' 4						226° 32' 5															
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3										
Lat.	<i>f</i>	13	22	23	24	25	<i>f</i>	13	22	23	24	25	<i>f</i>	13	22	23	24	25	<i>f</i>	13	22	23	24	25	<i>f</i>	13	22	23	24	25									
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°											
22	11.9	6.3	3	1	9.8	15.6	12.8	7.2	4	6	11	0	16.7	13.7	8.1	5	11	12.3	17.9	14.6	9.1	6	17	13.5	19.0	15.5	10.0	7	24	14.7	20.2	16.5	11	0	8	32	16	0	21.3
23	7	0	2	33	7	7	6	6.9	3	39	10.9	8	6	7.8	4	45	1	9	5	8.8	5	51	4	1	4	9.7	6	58	6	2	3	10	7	8	6	15.9	4		
24	6	5.6	2	5	6	7	5	6	3	11	8	8	4	5	4	17	0	18.0	3	5	5	24	3	1	2	4	6	31	5	3	2	4	7	39	8	4			
25	4	3	1	37	4	8	3	2	2	42	7	9	3	2	3	49	11.9	1	2	1	4	56	1	2	1	1	6	3	4	3	0	0	7	12	7	5			
26	11.3	0	1	7	9.3	15.8	2	5.9	2	13	5	9	1	6.8	3	20	8	1	0	7.8	4	27	0	3	14.9	8.7	5	35	14.3	20.4	15.9	9.7	6	43	6	6			
27	1	4.6	0	37	1	9	0	6	1	43	10.4	17.0	12.9	5	2	250	6	2	13.9	4	3	57	12.9	19.3	8	4	5	5	2	5	7	4	6	14	5	21.6			
28	0	3	0	6	0	9	11.9	2	1	12	2	1	8	1	2	19	5	2	7	1	3	27	8	4	6	0	4	35	1	6	5	0	5	44	15.4	7			
29	10.8	3.9	29	34	8.8	16.0	7	4.9	0	40	1	1	6	5.8	1	47	11.4	18.3	5	6.7	2	55	7	5	4	7.7	4	4	13.9	6	4	8.7	5	13	3	8			
30	6	6.2	9	0	7	0	5	5	0	7	0	2	4	4	1	14	2	4	4	4	223	5	5	3	3	3	31	8	20.7	2	3	4	41	1	9				
31	5	2	28	26	5	1	4	1	29	33	9.8	2	3	1	0	41	1	4	2	0	149	12.4	6	1	0	2	58	7	8	0	7.9	4	8	0	9				
32	3	2.8	27	51	3	1	2	3.8	28	58	6	17.3	1	4.7	0	6	10.9	5	0	5.6	1	14	2	19.7	13.9	6.6	2	23	6	9	14.8	5	3	34	14.9	22.0			
33	1	4	27	15	1	2	0	4	28	22	4	4	11.9	3	29	30	8	6	12.8	2	0	39	1	7	7	2	148	13.4	9	7	1	2	58	8	1				
34	9.9	0	26	37	7.9	16.3	10.8	0	27	44	3	5	7	3.9	28	52	6	18.6	6	4.8	0	1	11.9	8	6	5.8	1	11	3	21.0	5	6.7	2	21	6	2			
35	7	1.6	25	58	7	3	6	2.6	27	5	1	5	5	5	28	14	4	7	4	4	29	23	8	9	4	4	0	33	1	1	3	3	143	5	3				
36	5	2	25	18	5	4	4	1	26	25	8.9	6	3	1	27	34	2	7	2	0	28	42	6	20.0	2	4	9	29	53	12.9	2	1	5.9	1	4	14.3	4		
37	3	0.8	24	36	3	5	2	1.7	25	44	7	17.7	1	2.6	26	52	0	8	0	3.6	28	1	4	1	0	5	29	11	8	3	13.9	4	0	23	2	22.5			
38	1	3	23	52	1	6	0	2	25	0	4	8	10.9	2	26	8	9.8	9	11.8	1	27	17	2	2	12.8	0	28	28	6	4	7	0	29	40	0	6			
39	8.9	29.8	23	7	6.8	16.6	9.8	0.8	24	15	2	8	7	1.7	25	23	6	19.0	6	2.6	26	32	0	3	5	3.6	27	43	4	21.5	5	4.5	28	55	13.8	7			
40	7	4	22	20	6	7	6	3	23	28	0	9	5	2	24	36	4	1	4	1	25	46	10.8	4	3	1	26	56	2	6	2	0	28	S	6	8			
41	5	28.9	21	31	3	8	4	29.8	22	39	7.7	18.0	3	0.7	23	47	1	2	2	1.6	24	57	5	20.5	1	2.6	26	7	0	7	0	3.5	27	19	4	9			
42	3	4	20	40	0	9	2	3	21	47	5	1	1	2	22	56	8.9	3	0	1	24	6	3	6	11.9	0	25	16	11.8	8	12.5	0	26	28	2	23	0		
43	0	27.8	19	47	5.7	17.0	8.9	28.7	20	54	2	2	9.8	29.7	22	2	7	4	10.7	0	6	23	12	1	7	6	1.5	24	22	6	9	5	2.4	25	34	0	2		
44	7.8	3	18	51	4	1	7	2	19	58	6.9	3	6	1	21	6	4	19.5	5	0	22	16	9.9	8	4	0.9	23	26	3	22.1	3	1.8	24	35	12.8	3			
45	5	26.7	17	53	2	1	4	27.6	19	0	7	4	3	28.5	20	8	1	6	2	29.4	21	17	6	21.0	1	3	22	27	1	2	0	3	23	39	5	5			
46	2	1	16	51	4.9	2	1	0	17	58	4	18.5	0	27.9	19	6	7.8	7	9.9	28.8	20	15	3	1	10.9	29.7	21	25	10.8	4	11.7	0	7	22	36	3	23	6	
47	0	25.5	15	47	5	3	7.9	26.4	16	54	1	6	8.8	3	18	1	5	9	7	2	19	10	0	2	6	1	20	20	5	5	4	0	21	31	0	7			
48	6.8	24.9	14	40	1	17.5	6	25.8	15	46	5.7	7	5	26.7	16	53	1	20.0	4	27.6	18	1	8.7	3	3	28.5	19	11	2	22.6	1	29	4	20	22	11	7	8	
49	5	2	13	30	3.7	6	3	1	14	35	3	9	2	0	15	42	6.7	2	1	26.9	16	50	3	21.5	0	27.8	17	59	9.9	7	10.8	28	7	19	9	4	24	0	
50	2	2.23.5	12	16	2	7	0	24.4	13	20	4.8	19.0	7.9	25.3	14	26	3	3	8.8	2	15	34	7.9	6	9.7	1	16	42	5	9	5	0	17	52	1	2			
51	5.8	22.8	10	57	2.7	8	6.6	23.7	12	2	3	2	6	24.6	13	7	5.9	5	5	25.5	14	14	5	8	4	26.4	15	22	1	23.1	2	27.3	16	31	10.7	4			
52	5	0	9	35	2	18.0	3	22.9	10	39	3.8	4	3	23.8	11	43	4	7	1	24.7	12	49	0	22.0	0	25.6	13	56	8.7	3	9	9	26.5	15	5	3	6		
53	2	21.2	8	8	1.6	1	0	1	9	11	2	5	6.9	0	10	15	4.9	9	7.8	23.9	11	19	6.5	1	8.6	24	7	12	26	2	4	5	25	6	13	33	9.9	8	
54	4.8	20.4	6	37	0.9	3	5.7	21.3	7	38	2.6	7	5	22.1	8	41	3	21.0	4	0	9	44	5.9	3	2	23.8	10	50	7.7	6	1	24	7	11	56	4	25	0	
55	4	4.9	5	0	2	4	3	20.4	6	0	1.9	8	1	21.2	7	1	3.6	1	0	22.1	8	4	3	5	7.8	22.9	9	8	1	8	8.7	23	8	10	13	8.9	2		
56	0	18.6	3	18	29.3	6	4.9	19.4	4	17	1	20.0	5.6	20.2	5	16	2.8	3	6	6	21	1	6	17	4.6	7	4	21.9	7	20	6.4	24	0	22	8	8	24	3	4

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.										
SID. T. 15 14 16				15 18 19				15 22 24				15 26 29				15 30 35				15 34 42										
ARC 228° 33'.9				229° 34'.8				230° 36'.0				231° 37'.3				232° 38'.8				233° 40'.5										
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	$\text{h}$	$\text{m}$	$\text{s}$	$\text{x}$	$\text{y}$	$\text{h}$	$\text{m}$	$\text{s}$	$\text{x}$	$\text{y}$	$\text{h}$	$\text{m}$	$\text{s}$	$\text{x}$	$\text{y}$	$\text{h}$	$\text{m}$	$\text{s}$	$\text{x}$	$\text{y}$	$\text{h}$	$\text{m}$	$\text{s}$							
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°						
22	16.5	11.0	8 32	16.0	21.3	17.4	12.0	9 40	17.2	22.5	18.3	12.9	10 49	18.4	23.6	19.3	13.9	11 59	19.7	24.7	20.2	14.9	13 9	20.9	25.9					
23	3	10.7	8 6	15.9	4	3	11.6	9 15	1	5	2	6	10 24	4	7	1	6	11 33	6	8	0	6 12	44	9 26.0	0	6 13 55	2	1		
24	2	4	7 39	8	4	1	3	8 48	0	6	0	3	9 58	3	7	0	3 11	8	6	9	19.9	3 12 18	8	0	20.8	2 13 30	1	2		
25	0	0	7 12	7	5	16.9	0	8 21	16.9	7	17.9	0	9 31	2	8	18.8	12.9	10 41	5 25.0	7 13.9	11 52	8	1	7 14.9	13 4	1	3			
26	15.9	9.7	6 43	6	6	8 10.7	7 53	8 22.7	7	11.6	9 3	1	9	6	6 10 13	4	0	6	6 11 25	7	2	5	6 12 37	0 27.4						
27	7	4	6 14	5 21.6	6	3	7 24	7	8	5	3	8 34	0 24.0	5	3	9 45	19.3	1	4	2 10 57	20.6	26.3	3	2 12 10	21.9	5				
28	5	0	5 44	15.4	7	5	0	6 54	6	9	4	10.9	8 5 17.9	0	3	11.9	9 16	2	2	2 12.9	10 28	6	4	2 13.9	11 41	9	5			
29	4	8.7	5 13	3	8	3	9.6	6 23	5 23.0	2	6	7 34	9	1	1	6 8 46	2 25.3	1	5	9 58	5	5	0	5 11 12	8	6				
30	2	3	4 41	1	9	1	2	5 51	16.4	0	0	2	7 3	8	2	0	2 8 15	1	4	18.9	2 9 28	4	6	19.8	2 10 41	8 27.7				
31	0	7.9	4 8	0	9	15.9	8.9	5 19	3	1	16.9	9.8	6 30	7 24.3	17.8	10.8	7 42	0	5	7 11.8	8 56	3 26.7	6 12.8	10 10	7	8				
32	14.8	5	3 34	14.9	22.0	8	5	4 45	2	2	7	5	5 56	6	4	6	4 7 9 18.9	6	5	4	8 23	20.3	8	5	4 9 37	21.6	9			
33	7	1	2 58	8	1	6	1	4 9	1 23.3	5	1	5 21	17.5	5	4	0 6 35	8 25.7	3	0	7 49	2	9	3	0 9 3	5 28.0					
34	5	6.7	2 21	6	2	4	7.7	3 33	0	4	3	8.7	4 45	3	6	2 9.6	5 59	7	8	2 10.6	7 13	1 27.0	1 11.6	8 28	5	2				
35	3	3	1 43	5	3	2	3	2 55	15.8	5	1	2	4 8	2 24.7	0	2	5 21	6	9	0	2 6 36	0	1	18.9	2 7 52	4	3			
36	1	5.9	1 4	14.3	4	0	6.8	2 16	7	6	15.9	7.8	3 29	1	8	16.8	8.8	4 43	5 26.0	17.8	9.8	5 57	19.9	2	7 10.8	7 14	21.3	4		
37	13.9	4	0 23	2 22.5	14.8	4	1 35	6 23.7	7	4	2 48	0	9	6	3 4 2 18.4	1	6	3 5 17	8	3	5	3 6 34	2 28.5							
38	7	0 29	40	0	6	6	5.9	0 52	4	8	5	6.9	2 5 16.8	25.0	4	7.8	3 20	2	2	3 8.8	4 35	7 27.4	3 9.8	5 52	1	6				
39	5	4.5	28 55	13.8	7	4	4 0 7	2	9	3	4	1 21	7	1	2	4 2 35	1	3	1	4 3 51	6	5	0	4 5 8	0	8				
40	2	0 28	8	6	8	1	0 29	20	1 24.0	0	5.9	0 34	5	2	0	6.9	1 49	0 26.5	16.9	7.9	3 5 19.4	7 17.8	8.9	4 22	20.9	9				
41	0	3.5	27 19	4	9	13.9	4.5	28 31	14.9	1	14.8	4 29 45	3	4	15.7	4 1 0 17.8	6	6	4 2 17	3	8	6	3 3 34	8 29.0						
42	12.8	0 26	28	2 23.0	7	3 9 27	40	7	3	6	4.9	28 54	2 25.5	5	5.9	0 10	7	7	4	6.8	1 26	1 28.0	3	7.8	2 43	6	2			
43	5	2.4	25 34	0	2	4	4 26 47	5	4	3	3 28	1	0	7	3	3 29 16	5	9	1	3 0 33	0	1	0	3 1 51	5	3				
44	3	1.8	24 38	12.8	3	2	2.8	25 51	3 24.6	1	3.8	27 5 15.8	8	0	4 7.28	20	3 27.0	15.9	5.7	29 37	18.8	3 16.8	6.7	0 55	20.4	5				
45	0	3 23 39	5	5	12.9	2 24 52	0	7	13.8	2 26 6	6	9	14.7	1 27 21	1	2	6	1 28 38	6	4	5	1 29 56	2	6						
46	11.7	0 7 22 36	3 23.6	6	1.6	23 49	13.8	8	5	2.6	25 3	3 26.0	4	3.5	26 19 16.9	3	3	4.5	27 35	5 28.5	2	5.5	28 54	1	8					
47	4	0 21 31	0	7	3	0 22 44	6	9	2	1.9	23 58	1	2	1	2.9	25 13	7	4	0	3.8	26 30	3	7	15.9	4.8	27 48	19.9	8		
48	1	29.4	20 22	11.7	8	0	0 3 21 35	3 25.1	12.9	3 22 48	14.8	4	13.8	2 24 3	5	5	5 14.7	2 25 20	1	9	6	1 26 38	7	0.2						
49	10.8	28.7	19 9	4	24.0	11.7	29.6	20 21	1	2	6	0.6	21 35	6	6	5	1.5	22 50	3	7	4	2.5	24 6	17.9	29.1	3	3.4	25 24	6	3
50	5	0 17 52	1	2	4	28.9	19	4 12.8	4	3 29.8	20 17	4	7	2	0.8	21 31	1 28.0	1	1.7	22 47	8	3	0	2.7	24	5	5	5		
51	2	27.3	16 31	10.7	4	0	2 17 42	5	6	11.9	1 18 54	1	9	12.8	0 20	8 15.8	2 13.8	0 21 24	6	5	14.7	1.9	22 41	3	8					
52	9.9	26.5	15 5	3	6	10.7	27.4	16 15	1	8	6 28.3	17 27	13.8	27.1	5	29.2	18 40	5	4	4 0 2 19 55	3	7	3	1 21 11	1	10.0				
53	5	25.6	13 33	9.9	8	4	26.5	14 43	11.7	26.1	2 27.4	15 53	4	3	1 28.4	17 6	2	7	0 29.3	18 20	0	9	13.9	0 2 19 36	18.8	2				
54	1	24.7	11 56	4 25.0	0	25.6	13 4	2	3	10.8	26.5	14 14	0	6	11.7	27.5	15 26	14.8	9	12.6	28.4	16 39	16.7	0.2	5 29.3	17 54	5	5		
55	8.7	23.8	10 13	8.9	2	9.6	24.6	11 20	10.7	5	4 25.5	12 29	12.5	8	3 26.4	13 39	4 29.2	2 27.3	14 51	3	5	1 28.3	16 4	2	8					
56	2	22.8	8 24	3	4	1 23.6	9 29	1	7	0 24.4	10 36	0 28.1	10.8	25.3	11 45	13.9	4	11.7	26.3	12 55	15.9	8	12.6	27.2	14 7	17.9	2.1			

**TABLE OF HOUSES FOR LATITUDES 22° TO 56°.**

**UPPER MERIDIAN, CUSP OF 10th H.**

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H. M. S.												H. M. S.												H. M. S.												H. M. S.																																										
SID. T. 15 38 49			15 42 57			15 47 6			15 51 16			15 55 26			15 59 37																																																															
ARC 234° 42' 3			235° 44' 4			236° 46' 6			237° 48' 9			238° 51' 5			239° 54' 2																																																															
H. 11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3																																							
Lat.	f	15	16	17	f	15	16	17	18	f	15	16	17	18	f	15	16	17	18	f	15	16	17	18	f	15	16	17	18	f	15	16	17	18	f	15	16	17	18	f	15	16	17	18																																		
22°	22.1	16.9	15.30	23.5	28.2	23.0	17.9	16.42	24.8	29.3	24.0	18.9	17.55	26.0	0.5	24.9	19.9	19.8	27.3	1.6	25.9	20.9	20.22	28.6	2.8	26.8	22.0	21.36	29.9	3.9	22.1	16.9	15.30	23.5	28.2	23.0	17.9	16.42	24.8	29.3	24.0	18.9	17.55	26.0	0.5	24.9	19.9	19.8	27.3	1.6	25.9	20.9	20.22	28.6	2.8	26.8	22.0	21.36	29.9	3.9																		
23°	21.9	6.15	6	4	3	22.9	6	16.19	7	4	23.8	6	17.32	0	6	8	6	18.45	3	7	7	6	19.59	6	9	7	21.7	21.15	9	4.0	21.9	6.15	6	4	3	22.9	6	16.19	7	4	23.8	6	17.32	0	6	8	6	18.45	3	7	7	6	19.59	6	9	7	21.7	21.15	9	4.0																		
24°	8	2.14	42	4	3	7	2	15.54	7	5	6	3	17.8	0	7	6	3	18.22	3	8	6	3	19.37	6	3.0	5	4.20	52	9	1	8	2.14	42	4	3	7	2	15.54	7	5	6	3	17.8	0	7	6	3	18.22	3	8	6	3	19.37	6	3.0	5	4.20	52	9	1																		
25°	6	15.9	14.16	3	4	5	16.9	15.29	7	6	5	17.9	16.43	25.9	8	5	18.9	17.58	3	9	4	0.19	13	6	1	3	1.20	29	9	2	6	15.9	14.16	3	4	5	16.9	15.29	7	6	5	17.9	16.43	25.9	8	5	18.9	17.58	3	9	4	0.19	13	6	1	3	1.20	29	9	2																		
26°	4	6.13	50	23.3	5	4	6	15.4	6	29.7	3	6	16.18	9	9	9	24.3	6	17.33	2	2.0	2	19.7	18.49	6	2	2.20	8	20	5	9	3	4	6.13	50	23.3	5	4	6	15.4	6	29.7	3	6	16.18	9	9	9	24.3	6	17.33	2	2.0	2	19.7	18.49	6	2	2.20	8	20	5	9	3														
27°	3	2.13	23	2	2	2	14	37	24.6	8	2	3	15.52	9	1.0	1	3	17	7	27.2	1	1	4	18	24	28.5	3	0	5.19	41	29.9	4	3	2	2	2	14	37	24.6	8	2	3	15.52	9	1.0	1	3	15.52	9	1.0	1	3	17	7	27.2	1	1	4	18	24	28.5	3																
28°	1	14.9	12.55	2	7	0	15.9	14	9	5	9	0	16.9	15.25	8	1	0	17.9	16.41	2	2.49	0	17.58	5	4	25.8	1.19	15	9	4.5	1	14.9	12.55	2	7	0	15.9	14	9	5	9	0	16.9	15.25	8	1	0	17.9	16.41	2	2.49	0	17.58	5	4	25.8	1.19	15	9	4.5																		
29°	20.9	5	12.26	1	8	21.9	5	13.41	5	8	22.8	6	14.57	8	2	23.8	6	16.13	2	3	7	18.6	17.31	5	3.5	7	19.7	18.49	9	7	20.9	5	12.26	1	8	21.9	5	13.41	5	8	22.8	6	14.57	8	2	23.8	6	16.13	2	3	7	18.6	17.31	5	3.5	7	19.7	18.49	9	7																		
30°	8	2.11	56	23.1	9	7	2	13.11	4	0.1	6	2	14.28	25.8	3	6	2	15.45	1	4	5	2	17	3	5	6	5	3.18	21	8	8	30	8	2.11	56	23.1	9	7	2	13.11	4	0.1	6	2	14.28	25.8	3	6	2	15.45	1	4	5	2	17	3	5	6	5	3.18	21	8	8															
31°	6	13.8	11.25	0	29.0	5	14.8	12.41	24.4	2	5	15.8	13.57	7	4	4	16.8	15.15	1	7.5	4	17.8	16.34	5	7	3	18.9	17.53	9	9	6	13.8	11.25	0	29.0	5	14.8	12.41	24.4	2	5	15.8	13.57	7	4	4	16.8	15.15	1	7.5	4	17.8	16.34	5	7	3	18.9	17.53	9	9																		
32°	4	4.10	52	0	1	3	4	12	9	3	3	3	4	13.26	7	1.5	2	5	14.44	27.1	6	2	4	16	3	28.5	8	1	5.17	23	29.9	5.0	4	4.10	52	0	1	3	4	12	9	3	3	3	4	13.26	7	1.5	2	5	14.44	27.1	6	2	4	16	3	28.5	8	1	5.17	23	29.9	5.0														
33°	2	0.10	19	22.9	2	1	0.11	36	3	4	1	0.12	54	7	6	0	1	14	12	1	8	0	0.15	32	5	4	24.9	1.16	52	9	2	0.10	19	22.9	2	1	0.11	36	3	4	1	0.12	54	7	6	0	1	14	12	1	8	0	0.15	32	5	4	24.9	1.16	52	9	2																	
34°	0	12.6	9.44	9	3	0	13.6	11	1	2	0.5	21.9	14.6	12.20	25.6	7	22.8	15.6	13.39	0	9	23.8	16.6	14.59	5	1	7	17.7	16.20	9	3	0	12.6	9.44	9	3	0	13.6	11	1	2	0.5	21.9	14.6	12.20	25.6	7	22.8	15.6	13.39	0	9	23.8	16.6	14.59	5	1	7	17.7	16.20	9	3																
35°	19.8	2	9.8	8	29.5	20.8	2	10.26	24.2	6	7	2	11.44	6	8	6	2	13.4	0	3.0	6	2	14.24	4	2	5	3.15	46	9	4	19.8	2	9.8	8	29.5	20.8	2	10.26	24.2	6	7	2	11.44	6	8	6	2	13.4	0	3.0	6	2	14.24	4	2	5	3.15	46	9	4																		
36°	6	11.8	8.30	7	6	6	12.8	9.48	1	8	5	13.8	11	7	5	9	4	14.8	12.27	0	1	1	4.15	8.148	4	3	6	3.16	9.15	11	5.5	6	11.8	8.30	7	6	6	12.8	9.48	1	8	5	13.8	11	7	5	9	4	14.8	12.27	0	1	4.15	8.148	4	3	6	3	16.9	15	11	5.5																
37°	4	3	7.51	22.6	7	3	3	9	9	1	9	3	3	10.28	5	2.0	2	3	11.49	26.9	3	2	4	13	11	28.4	4.4	6	1	4.14	33	29.9	6	4	3	7.51	22.6	7	3	3	9	9	1	9	3	3	10.28	5	2.0	2	3	11.49	26.9	3	2	4	13	11	28.4	4.4	6	1	4.14	33	29.9	6												
38°	2	10.8	7.10	6	8	1	11.8	8.28	0	1.0	1	12.8	9.48	25.4	1	1	0	13.9	11	9	9	4	0	14.9	12.31	4	6	23.9	15.9	13.55	9	8	2	10.8	7.10	6	8	1	11.8	8.28	0	1.0	1	12.8	9.48	25.4	1	1	0	13.9	11	9	9	4	0	14.9	12.31	4	6	23.9	15.9	13.55	9	8														
39°	0	4	6.26	5	8	19.9	4	7.45	23.9	2	20.8	4	9	5	4	3	21.8	4	10.27	9	3.6	22.7	4	11.50	4	7	7	5	13.14	9	9	9	0	4	6.26	5	8	19.9	4	7.45	23.9	2	20.8	4	9	5	4	3	21.8	4	10.27	9	3.6	22.7	4	11.50	4	7	7	5	13.14	9	9															
40°	18.7	9.9	5.41	4	0.1	7	10.9	7	0	9	3	6	11.9	8.21	3	5	5	12.9	9.43	8	7	5	13.9	11	6	3	9	4	0.12	31	29	6	1	8.0	12.31	4	6	18.7	9.9	5.41	4	0.1	7	10.9	7	0	9	3	6	11.9	8.21	3	5	5	12.9	9.43	8	7	5	13.9	11	6	3	9	4	0.12	31	29	6	1	8.0	12.31	4	6	18.7	9.9	5.41	4
41°	5	3	4.53	22.3	3	4	3	6	13	8	5	4	4	7.34	3	6	3	4	8.57	8	9	2	4	10.20																																																						

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																					
SID. T.	15 59 37	16 3 48	16 8 0	16 12 13	16 16 27	16 20 41	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
ARC	239° 54'.2	240° 57'.1	242° 0'.1	243° 3'.3	244° 6'.7	245° 10'.2	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26					
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°				
22	26.8	22.0	21 36	29.9	3.9	27.8	23.0	22 51	1.2	5.1	28.8	24.0	24 7	2.5	6.2	29.7	25.1	25 24	3.7	7.3	0.7	26.2	26 41	5.0	8.5	1.7	27.2	27 59	6.3	9.6	
23	7	21.7	21 15	9	4.0	6	22.7	22 30	2	2	6	23.7	23 47	5	3	6	24.8	25 4	8	4	5	25.8	26 22	1	6	5	26.9	27 40	4	7	
24	5	4	20 52	9	1	5	4	22 8	2	3	4	4	23 25	5	4	4	5	24 43	8	5	4	5	26 2	1	7	3	6	27 21	4	8	
25	3	1	20 29	9	2	3	1	21 46	2	4	3	1	23 3	5	5	2	1	24 22	8	6	2	2	25 41	1	8	2	3	27 0	5	9	
26	2	20.8	20 5	9	3	1	21.8	21 23	2	5	1	22.8	22 41	5	6.6	1	23.8	24 0	3.8	8	0	24.9	25 19	2	9	0	0	26 40	6.5	10.1	
27	0	5	19 41	29.9	4	0	5	20 59	1.2	5.6	27.9	4	22 17	2.5	7	28.9	5	23 37	9	9	29.9	6	24 57	5.2	9.0	0.8	25.6	26 18	6	2	
28	25.8	1	19 15	9	4.5	26.8	1	20 34	2	7	8	1	21 53	6	9	7	1	23 13	9	8.0	7	2	24 34	2	2	7	3	25 56	6	3	
29	7	19.7	18 49	9	7	6	20.7	20 8	2	8	6	21.7	21 28	6	7.0	6	22.8	22 48	9	1	5	23.9	24 10	3	3	5	0	25 32	7	4	
30	5	3	18 21	9	8	4	3	19 41	2	9	4	4	21 2	6	1	4	4	22 23	4.0	3	3	5	23 45	3	4	3	24.6	25 8	6.7	10.6	
31	3	18.9	17 53	9	9	3	19.9	19 13	2	6.1	2	0	20 34	6	2	2	1	21 56	0	4	2	2	23 19	4	9.6	1	2	24 43	8	7	
32	1	5	17 23	29.9	5.0	1	5	18 44	1.3	2	0	20.6	20 6	2.7	4	0	21.7	21 29	0	8.5	0	22.8	22 52	5.4	7	29.9	23.9	24 17	8	9	
33	24.9	1	16 52	9	2	25.9	1	18 14	3	3	3	26.8	21 9 36	7	7.5	27.8	3	20 59	1	6	28.8	4	22 24	5	8	7	5	23 49	9	11.0	
34	7	17.7	16 20	9	3	7	18.7	17 42	3	5	6	19.8	19 5	7	6	6	20.9	20 29	1	8	6	0	21 54	5	10.0	5	1	23 20	7.0	2	
35	5	3	15 46	9	4	5	3	17 9	3	6.6	4	4	18 32	7	7	4	5	19 57	4.2	9	4	21.6	21 23	6	1	3	22.7	22 50	0	3	
36	3	16.9	15 11	9	5.5	3	17.9	16 34	3	7	2	0	17 58	2.7	8	2	1	19 24	2	9.1	2	1	20 50	6	3	1	2	22 18	1	5	
37	1	4	14 33	29.9	6	1	5	15 57	1.3	8	0	18.5	17 22	8	8.0	0	19.6	18 49	2	2	27.9	20.7	20 16	5.7	4	28.9	21.8	21 45	2	6	
38	23.9	15.9	13 55	9	8	24.9	0	15 19	3	7.0	25.8	1	16 45	8	1	26.8	1	18 12	3	4	7	2	19 40	8	10.6	7	3	21 10	7.3	8	
39	7	5	13 14	9	9	6	16.5	14 39	3	1	6	17.6	16 5	8	3	5	18.7	17 33	3	5	5	19.7	19 2	8	8	5	20.8	20 33	3	12.0	
40	4	0	12 31	9	6.1	4	0	13 57	4	3	3	1	15 24	2.9	5	3	2	16 53	4.4	7	3	2	18 22	9	9	2	3	19 54	4	1	
41	2	14.4	11 45	9	3	1	15.5	13 12	4	5	1	16.6	14 40	9	7	1	17.6	16 9	4	9	0	18.7	17 40	6.0	11.0	0	19.8	19 12	5	3	
42	22.9	13.9	10 58	29.9	4	23.9	14.9	12 25	1.4	6	24.9	0	13 54	9	9	25.8	1	15 24	5	10.1	26.7	2	16 56	0	2	27.7	3	18 28	7.6	5	
43	6	3	10 6	8	6	6	3	11 35	4	8	6	15.4	13 4	3.0	9.1	5	16.5	14 35	5	3	5	17.6	16 8	1	4	4	18.7	17 42	7	6	
44	4	12.7	9 14	8	8	3	13.7	10 42	4	8.0	3	14.8	12 12	0	2	2	15.9	13 44	6	5	2	0	15 17	2	6	2	1	16 52	8	8	
45	1	1	8 17	8	7.0	0	1	9 46	4	2	0	2	11 17	1	4	24.9	3	12 49	4.7	7	2	25.9	16.4	14 23	6.3	9	26.9	17.5	15 59	9	13.0
46	21.8	11.5	7 16	8	2	22.7	12.5	8 46	5	5	23.7	13.6	10 17	1	6	6	14.7	11 50	8	9	6	15.8	13 25	4	12.1	6	16.8	15 2	8.1	2	
47	5	10.8	6 12	29.8	4	4	11.8	7 42	1.5	7	4	12.9	9 14	2	8	3	0	10 48	8	11.1	3	1	12 23	5	3	3	2	14 1	2	4	
48	2	1	5 3	8	6	1	1	6 33	5	9	1	2	8 6	3.2	10.0	0	13.3	9 40	9	4	0	14.4	11 17	6	5	25.9	15.5	12 56	3	7	
49	20.9	9.4	3 49	8	8	21.8	10.4	5 20	5	9.1	22.8	11.5	6 53	3	3	23.7	12.6	8 28	5.0	6	24.6	13.7	10 5	6.7	8	6	14.7	11 45	5	14.0	
50	5	8.7	2 29	8	8.1	5	9.7	4 1	6	4	4	10.7	5 34	3	6	4	11.8	7 10	1	9	3	12.9	8 48	8	13.1	3	0	10 28	8.6	3	
51	2	7.9	1 4	8	4	1	8.9	2 36	6	7	1	9.9	4 9	4	9	0	0	5 45	2	12.2	23.9	1	7 24	9	4	24.9	13.2	9 5	7	6	
52	19.8	0 29 33	29.8	7	20.7	1	1	4	1.7	10.0	21.7	1	2 38	3.5	11.2	22.6	10.1	4 14	3	5	5	11.2	5 53	7.1	7	5	12.3	7 35	9	9	
53	4	6.1	27 54	8	9.0	3	7.2	29 25	7	3	2	8.2	0 59	6	5	2	9.2	2 35	5.4	8	1	10.3	4 14	3	14.1	1	11.3	5 57	9.1	15.2	
54	18.9	5.1	26 7	8	3	19.9	6.2	27 38	8	6	20.8	7.2	29 11	7	8	21.7	8.2	0 47	6	13.1	22.7	9.3	2 27	5	4	23.6	10.3	4 9	3	6	
55	5	4.1	24 11	8	6	4	5.1	25 41	8	9	3	6.1	27 14	7	12.2	3	7.1	28 50	7	5	2	8.2	0 28	7	8	1	9.3	2 10	6	16.1	
56	0	3.0	22 6	8	9	18.9	3.9	23 35	8	11.3	19.8	5.0	25 6	8	5	20.8	6.0	26 41	9	9	21.7	7.0	28 19	9	15.2	22.6	8.1	0 0	9	5	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																							
SID. T.	16 24 55	16 29 11	16 33 26	16 37 42	16 41 59	16 46 16																											
ARC	246° 13'.8) 8°	247° 17'.6)	248° 21'.6)	249° 25'.6)	250° 29'.8)	251° 34'.1)																											
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3								
Lat.	��	時	分	秒	時	��	時	分	秒	時	時	分	秒	時	時	分	秒	時	時	分	秒	時	時	分	秒	時							
22	2.6	23.3	29.18	7.6	10.7	3.6	29.4	0.37	8.9	11.9	4.6	0.5	1.57	10.3	13.0	5.6	1.6	3.17	11.6	14.1	6.6	2.7	4.38	12.9	15.2	7.6	3.8	5.59	14.2	16.4			
23	5	0	28.59	7	8	5	1	0.19	9.0	12.0	4	2	1.40	3	1	4	3	3.1	6	2	4	4	4.22	13.0	4	4	5	5.44	3	5			
24	3	27.7	28.40	7	11.0	3	28.8	0	1	1	3	29.9	1.22	4	2	3	0	2.44	7	4	3	1	4	6	1	5	2	2	5	29	4	6	
25	2	4	28.21	8	1	1	5	29.42	1	2	1	6	1.4	5	4	1	0.7	2.26	8	5	1	1.8	3.49	1	6	1	2.9	5	13	5	8		
26	0	1	28.1	8	2	0	2	2.29	23	2	3	3.9	3.045	5	13.5	4.9	4	2.8	9.14	6	5.9	5	3.32	2	7	6.9	6	4	5.6	14	6	9	
27	1.8	26.7	27.40	9	3	2.8	27.8	29.2	3	12.5	8	28.9	0.26	10.6	6	8	0	1.50	12.0	7	7	1	3.14	3	9	7	3	4.39	7	17.0			
28	6	4	27.18	8.0	11.5	6	5	28.41	9.3	6	6	6	0.5	7	7	6	29.7	1.30	1	9	6	0.8	2.56	13.4	16.0	6	0	4.22	8	2			
29	5	0	26.56	0	6	4	1	28.20	4	7	4	3	29.44	8	9	4	4	1.10	2.15	0	4	5	2.36	5	2	4	1.6	4	3	9	3		
30	3	25.7	26.32	1	7	3	26.8	27.57	5	9	2	27.9	29.22	9	14.0	2	0	0.49	3	2	2	2	2.16	7	3	2	3	3.44	15.1	5			
31	1	3	26.8	2	9	1	4	27.33	6	13.0	1	5.29	0.11	0	2	0	28.7	0.27	4	3	0	29.8	1.55	8	5	0	0.9	3.24	2	17.6			
32	0.9	0	25.42	2	12.0	1.9	1	27.8	9	6	2	2.9	2.28	36	1	3	3.8	3	0	4	12.5	5	4.8	5	1.33	9	16.6	5.8	6	3	3	3	8
33	7	24.6	25.15	8.3	2	7	25.7	26.42	7	3	7	26.8	28.11	2	5	6	27.9	29.40	6	15.6	6	1	1	10	14.0	8	6	2	2.40	4	9		
34	5	2	24.47	4	3	5	3	26.15	8	5	5	4	27.44	3	6	4	5.29	14	7	8	4	28.7	0.45	1	9	4	29.8	2.17	15.6	18.0			
35	3	23.8	24.18	5	5	3	24.9	25.47	9	13.6	3	0	27.17	4	8	2	1.28	48	8	9	2	3	0.20	3	17.1	2	4	1	53	7	1		
36	1	3	23.47	6	6	1	4	25.17	10.0	8	1	25.6	26.48	11.5	15.0	0	26.7	28.20	9	16.0	0	27.8	29.53	4	3	0	0	1.27	9	3			
37	29.9	22.9	23.15	8.6	8	0.8	0	24.45	1	9	1.8	1	26.17	6	1	2.8	3	27.51	13.1	2	3.8	4	29.25	14.6	5	4.5	28.5	1	0	16.0	5		
38	7	4	22.40	7	13.0	6	23.5	24.12	2	14.0	6	24.7	25.45	7	2	6	25.8	27.20	2	4	6	26.9	28.55	7	6	6	1	0.32	2	7			
39	4	21.9	22.4	8	1	4	0	23.37	3	2	4	2.25	11	8	4	4	3.26	47	4	6	3	5.28	23	9	8	3	27.6	0	1	4	9		
40	2	4	21.26	9	3	2	22.5	23.0	4	4	4	1.23	7	24.35	12.0	6	1	24.8	26.12	5	8	1	0.27	50	15.0	18.0	1	1.29	29	5	19.1		
41	28.9	20.9	20.46	9.0	5	29.9	0	22.21	10.5	6	0.9	2	23.57	1	8	1.9	3	25.35	7	17.0	2	25.5	27.14	2	2	3.8	26.6	28.54	7	3			
42	7	4	20.3	2	7	7	21.5	21.39	6	8	6	22.6	23.17	3	16.0	6	23.8	24.56	9	2	6	24.9	26.36	4	4	6	1	28.18	9	5			
43	4	19.8	19.17	3	9	4	20.9	20.55	7	15.0	4	0.22	33	5	2	3	2	24.14	14.1	4	4	3	3.25	55	6	6	3	25.5	27.39	17.1	8		
44	1	2	18.29	4	14.1	1	3	20.7	9	2	1	21.4	21.47	12.6	5	5	1.22	6	23.29	3	7	0	23.7	25.12	8	9	0	24.9	26.57	3	20.0		
45	27.8	18.6	17.36	9.6	3	28.8	19.7	19.16	11.1	4	29.8	20.8	20.57	7	7	0.8	0.22	40	5	9	1.7	1	24.25	16.0	19.1	2.7	3	26.12	6	3			
46	5	17.9	16.41	7	6	5	0	18.22	3	7	5	2	20.4	9	9	5	21.3	21.48	7	18.1	4	22.5	23.35	2	3	4	23.6	25.23	8	6			
47	2	3	15.41	8	8	2	18.4	17.23	5	9	2	19.5	19	7	13.1	17.1	2	20.6	20.52	9	3	1	21.8	22.41	4	6	1	0	24.31	18.1	8		
48	26.9	16.6	14.36	9	15.0	27.9	17.7	16.19	7	16.2	28.9	18.8	18.5	3	4	29.8	19.9	19.52	15.1	6	0.8	1	21.42	7	9	1	8	22.3	23.34	4	21.1		
49	6	15.8	13.27	10.1	3	5	16.9	15.11	9	5	5	1	16.58	5	7	5	2	18.46	3	9	5	20.4	20.38	17.0	20.2	5	21.5	22.32	7	4			
50	2	1	12.11	3	6	2	2	13.56	12.1	8	1	17.3	15.41	8	18.0	1	18.4	17.35	6	19.2	1	19.6	19.28	3	5	1	20.8	21.24	19.0	7			
51	25.8	14.3	10.49	5	9	26.8	15.4	12.35	3	17.2	27.8	16.5	14.24	14.1	3	28.7	17.6	16.16	9	5	29.7	18.8	18.11	6	8	0.7	19.9	20.9	4	22.0			
52	4	13.4	9.19	7	16.2	4	14.5	11.7	6	5	4	15.6	12.57	4	6	3	16.7	14.50	16.2	9	3	17.9	16.47	18.0	21.1	3	0	18.46	8	4			
53	0	12.4	7.42	9	6	0	13.5	9.30	9	8	0	14.7	11.21	7	19.0	27.9	15.8	13.15	5	20.3	28.9	16.9	15.14	4	5	29.9	18.1	17.15	20.2	7			
54	24.6	11.4	5.54	11.2	9	25.5	12.5	7.43	13.2	18.2	26.5	13.6	9.35	15.0	4	4	14.8	11.31	9	7	4	15.9	13.31	8	9	4	17.1	15.34	7	23.1			
55	1	10.3	3.56	5	17.3	0	11.4	5.45	5	6	0	12.5	7.38	4	8	26.9	13.7	9.35	17.3	21.1	27.9	14.8	11.36	19.3	22.3	28.9	16.0	13.41	21.2	6			
56	23.6	9.1	1.45	8	7	24.5	10.2	3.34	9	19.0	25.5	11.3	5	27	8	20.2	4	12.5	7.25	8	5	4	13.6	9.27	8	7	3	14.8	11.33	8	24.0		

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.			H. M. S.				
SID. T.	16 46 16	16 50 34	16 54 52	16 59 11	17 3 30	17 7 49	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	
ARC	251° 34'.1	13°	252° 38'.5	14°	253° 43'.1	15°	254° 47'.7	16°	255° 52'.5	17°	256° 57'.3	18°	11	12	1	2	3	11	12	1	2	3
II.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3		
Lat.	15	16	17	18	19	15	16	17	18	19	15	16	17	18	19	15	16	17	18	19		
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°		
22	7.6	3.8	5.59	14.2	16.4	8.6	4.9	7.21	15.5	17.5	9.6	6.1	8.43	16.8	18.6	10.6	7.2	10.6	18.1	19.7	11.6	
23	4	5	5 44	3	5	4	6	7 7	6	6	4	5.8	8 30	9	7	4	6.9	9 53	2	9	4	
24	2	2	5 29	4	6	2	3	6 52	7	8	2	5	8 16	17.0	9	3	6	9 40	4	20.0	3	
25	1	2.9	5 13	5	8	1	0	6 37	8	9	1	2	8 2	2	19.0	1	3	9 27	5	1	1	
26	6.9	6	4 56	14.6	9	7.9	3.7	6 21	9	18.0	8.9	4.9	7 47	3	1	9.9	0	9 13	18.6	3	10.9	
27	7	3	4 39	7	17.0	7	4	6 5	16.0	2	7	6	7 31	4	3	8	5.7	8 59	8	4	8	
28	6	0	4 22	8	2	6	1	5 48	2	3	6	2	7 15	17.5	4	6	4	8 44	9	20.5	6	
29	4	1.6	4 3	9	3	4	2.8	5 31	3	4	4	3.9	6 59	7	19.6	4	1	8 28	19.0	7	4	
30	2	3	3 44	15.1	5	2	4	5 12	4	18.6	2	6	6 42	8	7	2	4.7	8 11	2	9	2	
31	0	0.9	3 24	2	17.6	0	1	4 53	16.6	7	0	3	6 23	18.0	9	0	4	7 54	4	21.0	0	
32	5.8	6	3 3	3	8	6.8	1.7	4 33	7	9	7.8	2.9	6 4	1	20.0	8.8	1	7 36	5	2	9.8	
33	6	2	2 40	4	9	6	4	4 12	9	19.0	6	5	5 45	3	2	6	3.7	7 18	7	3	6	
34	4	29.8	2 17	15.6	18.0	4	0	3 50	17.0	2	4	1	5 24	4	4	4	3	6 58	9	5	4	
35	2	4	1 53	7	1	2	0.6	3 27	2	4	2	1.7	5 2	6	5	2	2.9	6 37	20.0	7	2	
36	0	0	1 27	9	3	0	1	3 2	4	6	0	3	4 38	8	7	0	5	6 15	2	9	0	
37	4.8	28.5	1 0	16.0	5	5.8	29.7	2 37	5	7	6.8	0.9	4 14	19.0	9	7.8	1	5 52	4	22.1	8.8	
38	6	1	0 32	2	7	6	3	2 9	7	9	6	4	3 48	2	21.1	6	1.6	5 27	6	2	6	
39	3	27.6	0 1	4	9	3	28.8	1 40	9	20.1	3	0	3 20	4	3	3	2	5 1	8	4	4	
40	1	1	29.29	5	19.1	1	3	1 9	18.0	3	1	29.5	2 51	5	5	1	0.7	4 34	21.0	6	1	
41	3.8	26.6	28.54	7	3	4.8	27.8	0 36	2	5	5.8	0	2 19	7	7	6.9	2	4 4	2	8	7.9	
42	6	1	28.18	9	5	6	3	0 1	5	7	6	28.4	1 46	9	9	6	29.6	3 32	5	23.0	6	
43	3	25.5	27 39	17.1	8	3	26.7	29 24	7	9	3	27.9	1 10	20.2	22.1	3	1	2 58	8	3	3	
44	0	24.9	26 57	3	20.0	0	1	28 44	9	21.2	0	3	0 32	5	4	0	28.5	2 22	22.1	5	1	
45	2.7	3	26 12	6	3	3.7	25.5	28 0	19.2	5	4.7	26.7	29 50	8	6	5.7	27.9	1 42	4	8	6.8	
46	4	23.6	25 23	8	6	4	24.8	27 14	4	7	4	0 29	6 21.1	9	4	2	1 0	7 24.1	5	28.5	2 55	
47	1	0	24 31	18.1	8	1	1	26 23	7	22.0	1	25.3	28 17	4	23.2	1	26.6	0 13	23.0	4	1	
48	1.8	22.3	23 34	4	21.1	2.8	23.4	25 28	20.0	3	3.8	24.6	27 25	7	5	4.8	25.9	29 23	3	7	5.8	
49	5	21.5	22 32	7	4	4	22.7	24 28	3	6	4	23.9	26 27	22.0	8	4	22.8	28	7.25	4	26.4	
50	1	20.8	21 24	19.0	7	1	21.9	23 22	7	9	1	1 25 23	4 24.1	1	24.4	27 27	24.1	3	1 25.6	29 34		
51	0.7	19.9	20 9	4	22.0	1.7	1 22 10	21.1	23.2	2.7	22.3	24 13	8	4	3.7	23.5	26 20	5	7	4.7	24.8	
52	3	0	18 46	8	4	3	20.2	20 50	5	6	3	21.4	22 56	23.2	8	3	22.6	25 5	25.0	26.0	3	
53	29.9	18.1	17 15	20.2	7	0.9	19.2	19 21	22.0	24.0	1.9	20.4	21 30	7	25.2	2.9	21.7	23 42	5	3	9.22.9	
54	4	17.1	15 34	7	23.1	4	18.2	17 41	5	4	4	19.4	19 53	24.3	6	4	20.6	22 9	26.1	7	4	
55	28.9	16.0	13 41	21.2	6	29.9	17.1	15 50	23.1	8	0.9	18.3	18 4	9	26.0	1.9	19.5	20 23	8	27.2	2.9	
56	3	14.8	11 33	8	24.0	3	15.9	13 45	7	25.2	3	17.0	16 1	25.6	5	3	18.2	18 22	27.6	8	3	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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SID. T. 17 12 9						H. M. S. 17 16 29						H. M. S. 17 20 49						H. M. S. 17 25 10						H. M. S. 17 29 30																	
ARC 258° 2'2						19°						259° 7'2						260° 12'3						261° 17'4						262° 22'6						263° 27'8					
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3						
Lat.	W	W	X	Y	8	W	W	X	Y	8	W	W	X	Y	8	W	W	X	Y	8	W	W	X	Y	8	W	W	X	Y	8	W	W	X	Y	8						
22°	13.6	10.7	14 17	22.0	23.0	14.6	11.8	15 42	23.3	24.1	15.6	13.0	17	6	24.6	25.2	16.7	14.2	18 32	25.9	26.3	17.7	15.4	19 57	27.2	27.4	18 S	16.6	21 23	28.5	28.5										
23	5	4 14	7	2	2	5	6	15 32	5	3	5	12.7	16 55	S	4	5	13.9	18 24	26.1	5	5	1 19	51	4	6	6	3 21	17	7	6											
24	3	1 13	57	3	3	3	3	15 23	6	4	3	5 16	50	9	5	4	7 18	17	2	6	4 14.9	19 44	6	7	4	1 21	11	9	8												
25	1	9.8	13 46	5	5	2	0	15 13	S	6	2	2 16	41	25.1	7	2	4 18	9	4	8	2	6 19	37	7	9	3 15.5	21	5 29	1	9											
26	0	5 13	35	6	23.6	0	10.7	15	3	24.0	7	0	11.9	16 31	3	8	0	1 18	0	6	9	1	3 19	30	9 28.0	1	5 20	59	3 29.1												
27	12.8	2 13	23	8	8	13.8	4 14	52	1	9	14.8	6 16	22	5	26.0	15.9	12.8	17 52	S 27.1	16.9	0 19	22	28.1	2	17.9	3 20	53	5	3												
28	6	8.9	13 11	23.0	9	6	1 14	41	3	25.0	7	3 16	12	6	1	7	5 17	43	27.0	2	7 13.7	19 14	3	3	8	0 20	46	7	4												
29	4	6 12	58	1	24.0	5	9.8	14 30	5	2	5	0 16	1	8	3	5	2 17	33	2	4	6	5 19	6	5	5	6 14.7	20 39	9	6												
30	3	3 12	45	3	2	3	5 14	17	7	3	3	10.7	15 50	26.0	4	3	11.9	17 24	4	5	4	2 18	57	8	6	4	4 20	31	0 1	7											
31	1	0 12	31	5	4	1	2 14	5	9	5	1	4 15	39	2	6	2	6 17	13	6	7	2 12.9	18 48	29.0	S	2	1 20	24	3	9												
32	11.9	7.6	12 17	7	5	12.9	8.9	13 51	25.1	7	13.9	1 15	27	4	8	0	3 17	3	8	9	0	5 18	39	2 29.0	1 13.8	20 16	5	0.1													
33	7	3 12	2	9	7	7	5 13	37	3	8	7	9.7	15 14	7	27.0	14.8	0 16	51	28.0	28.1	15.8	2 18	29	4	2	16.9	4 20	7	8	3											
34	5	6.9	11 46	24.1	9	5	1 13	23	5	26.0	5	3 15	1	9	1	6	10.6	16 39	3	3	6 11.8	18 18	6	4	7	1 19	58	1.0	5												
35	3	5 11	29	3	25.1	3	7.7	13	7	7	2	3	0 14	47	27.1	3	4	2 16	27	5	4	4	4 18	7	9	6	5 12.7	19 48	3	7											
36	1	1 11	11	5	3	1	3 12	51	26.0	4	1	8.6	14 32	4	5	2	9.8	16 14	8	6	2	1 17	56	0.2	8	3	3 19	38	6	9											
37	10.8	5.7	10 52	8	5	11.9	6.9	12 34	2	6	12.9	2 14	16	6	7	13.9	4 15	59	29.1	8	0 10.7	17 43	5	□	0 11.9	19 27	9	1.1													
38	6	2 10	32	25.0	7	7	5 12	15	5	8	7	7.7	14	0	9	9	7	0 15	44	4 29.0	14.8	3 17	30	S	0.2	15.8	5 19	16	2.2	3											
39	4	4.8	10 11	3	9	4	0 11	56	8	27.0	5	3 13	42	28.2	28.1	5	8.6	15 28	7	3	5	9.8	17 16	1.1	4	6	1 19	4	5	5											
40	2	3	9 48	5	26.1	2	5.6	11 35	27.0	2	2	6.8	13 23	5	3	2	1 15	11	8	5	3	4 17	1	4	6	3 10.7	18 51	8	7												
41	9.9	3.8	9 24	8	3	10.9	1 11	13	3	4	0	3 13	3	9	5	0	7.6	14 53	0.3	7	0	8.9	16 45	8	8	1	2 18	37	3.2	20											
42	6	3	8 58	26.1	5	7	4.6	10 49	6	6	11.7	5.8	12 41	29.2	7	12.7	1 14	34	7	□	13.8	4 16	28	2.2	1.1	14.8	9 7	18 22	6	2											
43	4	2.8	8 30	4	7	4	0 10	23	9	9	4	3 12	18	6	29.0	5	6.6	14 13	1.1	0.2	5	7.9	16	9	6	4	6	2 18	6	4.0	5										
44	1	2 8	0	7	27.0	1	3.5	9 55	28.3	28.1	1	4.7	11 52	8	3	2	0 13	50	5	4	2	3 15	49	3.0	6	3	8 6	17 49	5	7											
45	8.8	1.6	7 27	27.1	2	9.8	2.9	9 26	7	4	10.8	1 11	25	0.4	6	11.9	5.4	13 26	9	7	12.9	6.7	15 27	4	9	0	0 17	30	9	30											
46	5	0	6 52	5	5	5	2	8 53	29.1	7	5	3.5	10 55	7	9	6	4.8	12 59	2.3	1.0	6	1 15	4	8	2 2	13.7	7 4	17	9	5.3	3										
47	2	0.3	6 14	9	8	2	1.6	8 17	5	29.0	2	2.8	10 23	1.1	0.2	3	1 12	29	7	3	3	5 5.5	14 38	4.2	4	3	6 8	16 47	7	6											
48	7.8	29.6	5 32	28.3	28.2	8.9	0.9	7 38	9	3	9.9	1	9 47	5	5	10.9	3.4	11 57	3.1	6	0	4.8	14	9	7	7	0	1 16	22	6.2	9										
49	5 28.9	4 45	7	5	5	1	6 55	0.3	6	5	1.4	9	8	2.0	8	6	2.7	11 22	6	2.0	11.6	1 13	37	5.2	3.1	12.7	5 4	15 55	7	4.3											
50	1	1	3 54	29.2	8	1 29.4	6	8	S	□	2	0.7	8 24	5	1.2	2	0 10	42	4.1	3	2	3 4	13	2	7	4	3	3 7	15 24	7.3	6										
51	6.7	27.3	2 57	7 29.2	7.8	28.6	5 15	1.3	0.4	S 8 29.9	7 35	3.1	5	9.8	1.2	9 58	7	7	10 9	2 6	12 23	6.3	8	11 9	3 9	14 50	9	50													
52	3 26.4	1 53	0.3	5	4	27.7	4 15	9	S	4	0	6 41	7	9	4	0.3	9	9	5.3	3.1	5	1.7	11 39	7 0	4.2	3	0 14	1	8 6	4											
53	5.9	25.4	0 42	9	9	6.9	26.8	3	S	2.6	1.2	7.9	28.1	5 39	4.4	2.3	0 29	4	8 13	6.0	5	0	0 7	10 48	7	6	1	2 11	13 28	9.4	8										
54	4 24.4	29 20	1.6	0.3	4	25.8	1 52	3.3	6	4 27.1	4 28	5.1	8	8.5	28.3	7	8	8	9	9 5 29.7	9 51	8.5	5.1	10.6	1 11	12 37	10.2	6.2													
55	4.9	23.3	27 47	2.3	8	5.9	24.6	0.25	4.1	2.0	6.9	25.9	3	7	9	3.3	0 27.2	5 54	7.6	4.4	0 28.6	8 44	9.4	6	0	0 0 11	38 11.1	7	7												
56	3 22.0	26 0	3.1	1.3	3	23.3	28 41	5.0	5	4 24.6	1 33	6.8	9	7.4	26.0	4 27	8.5	9	8 4 27 4	7 26	10 4	6.2	9	8 28 8 1	1 30	12.1	7.2														

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.																														
SID. T.	17 33 51	17 38 13	17 42 34	17 46 55	17 51 17	17 55 38	17 59 59	17 59 59	17 59 59	17 59 59	17 59 59																			
ARC	263° 27'.8	24°	264° 33'.1	25°	265° 38'.5	26°	266° 43'.8	27°	267° 49'.2	28°	268° 54'.6	29°																		
Lat.	H	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3				
o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o				
22	18.8	16.6	21 23	28.5	28.5	19.8	17.8	22 49	29.8	29.6	20.8	19.0	24 15	1.0	0.7	21.9	20.2	25 41	2.3	1.7	22.9	21.5	27 7	3.6	2.8	24.0	22.7	28 33		
23	6	3	21 17	7	6	6	5	22 44	9	7	7	18.8	24 11	2	8	7	0	25 38	5	9	8	227	5	8	3.0	23.8	5 28 33	5.0	4.0	
24	4	1	21 11	9	8	5	3	22 39	0.1	9	5	5	24 7	4	1.0	6	19.8	25 35	7	2.0	6	0	27 3	4.0	1	7	228 32	2	2	
25	3	15.8	21 5	29.1	9	3	0	22 34	3	π	4	3	24 3	6	1	4	5	25 32	9	2	5	20.7	27 1	2	3	5	0 28 31	5	3	
26	1	5	20 59	3	29.1	2	16.8	22 29	5	0.2	2	0	23 59	8	3	3	3	25 29	3.1	3	22.3	5	26 59	4	4	4	21.8	28 29	7	5
27	17.9	3	20 53	5	3	0	5	22 24	7	3	0	17.8	23 55	2.1	4	1	0	25 26	4	5	2	226 57	6	3.6	2	5 28 28	9	7		
28	8	0	20 46	7	4	18.8	2	22 18	1.0	5	19.9	5	23 50	3	1.6	20.9	18.7	25 22	6	7	0	0	26 55	9	7	0	3 28 27	6.2	8	
29	6	14.7	20 39	9	6	7	15.9	22 12	2	7	7	2	23 45	5	7	8	5	25 19	8	8	21.8	19.7	26 52	5.1	9	22.9	0 28 26	4	5.0	
30	4	4	20 31	0.1	7	5	6	22 6	4	8	5	16.9	23 40	7	9	6	2	25 15	4.1	3.0	6	4	26 50	4	4.1	7	20.7	28 25	7	1
31	2	1	20 24	3	9	3	3	21 59	6	1.0	3	6	23 35	3.0	2.1	4	17.9	25 11	3	2	5	226 47	6	3	5	5 28 23	9	3		
32	1	13.8	20 16	5	0.1	1	0	21 52	9	2	2	3	23 29	2	3	2	6	25 7	5	3	3	18.9	26 44	9	4	4	228 22	7.2	5	
33	16.9	4	20 7	8	3	17.9	14.7	21 45	2.1	4	0	0	23 23	5	4	0	3	25 2	8	5	1	6	26 41	6.1	6	2	19.9	28 21	5	7
34	7	1	19 58	1.0	5	7	4	21 38	4	5	18.8	15.6	23 17	7	6	19.8	16.9	24 58	5.1	7	20.9	226 38	4	8	0	6 28 19	8	9		
35	5	12.7	19 48	3	7	5	0	21 30	7	7	6	3	23 11	4.0	8	6	6	24 53	4	9	7	17.9	26 35	7	5.0	21.8	228 18	8.1	6.1	
36	3	3	19 38	6	9	3	13.6	21 21	3.0	9	4	14.9	23 4	3	3.0	4	224 48	7	4.1	5	5	26 32	7.1	2	6	18.9	28 16	4	3	
37	0	11.9	19 27	9	1.1	1	2	21 12	3	2.1	1	5	22 57	7	2	2	15.9	24 43	6.0	3	3	226 28	4	4	3	5 28 14	8	5		
38	15.8	5	19 16	2.2	3	16.9	12.8	21 2	6	4	17.9	1	22 49	5.0	5	0	5	24 37	4	5	1	16.8	26 24	8	6	1	128 12	9.1	7	
39	6	1	19 4	5	5	6	4	20 52	9	6	7	13.7	22 41	4	7	18.8	124 31	7	8	19.8	4 26 20	8.1	9	20.9	17.7	28 10	5	9		
40	3	10.7	18 51	8	7	4	0	20 41	4.3	8	4	3	22 33	7	9	5	14.6	24 24	7.1	5.0	6	0 26 16	5	6.1	6	3 28 8	9	7.2		
41	1	2	18 37	3.2	2.0	1	11.5	20 30	7	3.1	2	12.8	22 23	6.1	4.2	3	224 17	5	2	3	15.5	26 11	9	3	4	16.9	28 6	10.3	4	
42	14.8	9.7	18 22	6	2	15.9	0	20 17	5.1	3	16.9	4	22 13	5	4	0	13.7	24 10	8.0	5	1	126 6	9.4	6	2	4 28 3	8	7		
43	6	2	18 6	4.0	5	6	10.5	20 4	5	6	7	11.9	22 2	7.0	7	17.7	224 1	4	8	18.8	14.6	26 1	8	9	19.9	0 28 0	11.2	8.0		
44	3	8.6	17 49	5	7	3	9.9	19 49	6.0	8	4	3	21 51	4	9	5	12.7	23 52	9	6.0	5	125 55	10.3	7.1	6	15.5	27 57	7	2	
45	0	0	17 30	9	3.0	0	4	19 33	4	4.1	1	10.8	21 38	9	5.2	2	123 43	9.4	3	2	13.5	25 48	8	4	3	14.9	27 54	12.2	5	
46	13.7	7.4	17 9	5.3	3	14.7	8.8	19 16	8	4	15.8	2	21 24	8.3	5	16.9	11.6	23 32	9	6	17.9	12.9	25 41	11.3	7	0	4 27 51	7	8	
47	3	6.8	16 47	7	6	4	2	18 57	7.3	7	5	9.6	21 9	8	8	5	0 23 21	10.4	9	6	3	25 34	8	8.0	18.7	13.9	27 47	13.2	9.1	
48	0	1	16 22	6.2	9	1	7.5	18 37	8	5.0	1	8.9	20 52	9.3	6.1	2	10.4	23 8	9	7.2	3	11.7	25 25	12.4	3	3	3 27 42	8	4	
49	12.7	5.4	15 55	7	4.3	13.7	6.8	18 13	8.3	3	14.8	2	20 33	9	4	15.8	9.7	22 54	11.5	5	16.9	1 25 16	13.0	6	0	12.6	27 38	14.4	7	
50	3	4.7	15 24	7.3	6	3	1	17 48	9	7	4	7.5	20 12	10.5	8	5	0 22 38	12.1	9	6	10.4	25 5	6	9.0	17.6	11.9	27 33	15.1	10.1	
51	11.9	3.9	14 50	9	5.0	0	5.3	17 19	9.5	6.1	0	6.7	19 49	11.2	7.2	1	8.2	22 21	8	8.3	2	9.6	24 53	14.3	4	2	2 27 27	8	5	
52	5	0	14 12	8.6	4	12.6	4.4	16 46	10.2	5	13.6	5.9	19 23	9	6	14.7	7.4	22 1	13.5	7	15.8	8.8	24 40	15.1	8	16.8	10.4	27 20	16.6	9
53	1	2.1	13 28	9.4	8	1	3.5	16 9	11.0	9	2	0	18 52	12.7	8.0	2	6.5	21 38	14.3	9.1	3	7.9	24 25	9	10.2	4	9.5	27 12	17.5	11.3
54	10.6	1.1	12 37	10.2	6.2	11.6	2.5	15 26	9	7.4	12.7	4.0	18 18	13.6	5	13.7	5.5	21 12	15.2	6	14.8	6.9	24 7	16.8	7	15.9	8.5	27 3	18.4	8
55	0	0	11 38	11.1	7	1	1.4	14 36	12.8	9	2	2.9	17 37	14.5	9.0	2	4.4	20 41	16.1	10.1	3	5.9	23 46	17.8	11.2	4	7.4	26 53	19.4	12.3
56	9.5	28.8	10 30	12.1	7.2	10.5	0.2	13 38	13.8	8.5	11.6	1.7	16 49	15.5	6	12.7	3.2	20 4	17.1	7	13.7	4.7	23 21	18.9	8	14.8	6.2	26 40	20.5	9

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.												H. M. S.												H. M. S.												H. M. S.											
SID. T. 18 0 0						18 4 22						18 8 43						18 13 5						18 17 26						18 21 47						H. M. S.						H. M. S.					
ARC 270° 0' 0"						271° 5' 4)						272° 10' 8)						273° 16' 2)						274° 21' 5)						275° 26' 0)						H. M. S.						H. M. S.					
Lat.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3		
22°	23.0	23.9	0	0	6.1	5.0	26.1	25.2	1 27	7.3	6.0	27.2	26.4	2 53	8.5	7.1	28.3	27.7	4 19	9.8	8.1	29.3	29.0	5 45	11.0	9.2	0 4	0.2	7 11	12 2	10.2	0 4	0.2	7 11	12 2	10.2											
23°	24.9	7	0	0	3	1	0	0	1 27	5	2	0	2	2 55	8	2	1	5	4 22	10.0	3	2 25.8	5 49	2	3	3	1	7 16	5	4	3	1	7 16	5	4												
24°	7	5	0	0	5	3	25.8	24.8	1 28	8	3	26.9	0	2 57	9.0	4	0	3	4 25	2	4	0	6	5 53	5	5	1 29.9	7 21	7	5	1 29.9	7 21	7	5													
25°	6	3	0	0	7	4	7	5	1 29	8.0	5	7	25.8	2 59	3	5	27.8	1 428	5	6	28.9	4 557	7	6	0	7	7 26	13.0	7	0	7	7 26	13.0	7													
26°	4	0	0	0	7.0	5.6	5	3	1 31	2	6	6	6	3 1	5	7	7	26.9	4 31	7	7	7	2	6	1 12.0	8 29.8	5 731	2	8	1 29.8	5 731	2	8														
27°	3	22.8	0	0	2	7	3	1	1 32	5	8	4	4	3 3	8	8	5	6	4 34	11.0	9	6 27.9	6 5	2 10.0	7	3	7 36	5 11.0	7	3	7 36	5 11.0	7														
28°	1	5	0	0	5	9	2	23.8	1 33	7	7.0	3	1	3 5	10.0	8.0	3	4	4 38	3	9.1	4	7	6 10	5	1	5	0	7 42	8	2	5	0	7 42	8	2											
29°	23.9	3	0	0	7	6.1	0	6	1 34	9.0	1	1 24.9	3 8	3	2	2	2 441	5	2	3	5 615	8	3	3 25.8	7 45	14.1	3	3	25.8	7 45	14.1	3															
30°	8	0	0	0	8.0	2	24.9	3	1 35	3	3	25.9	6	3 10	6	4	0 25.9	4 45	8	4	1	3 620	13.1	5	2	6	7 54	4	5	2	6	7 54	4	5													
31°	6	21.8	0	0	2	4	7	1	1 37	5	5	7	4	3 13	8	5	26.8	7 449	12.1	6	27.9	0 625	4	7	0	4 8 1	7	7	0	4 8 1	7	7															
32°	4	5	0	0	5	6	5	22.8	1 38	8	6	6	1	3 16	11.1	7	7	5	4 53	4	8	7 26.8	6 31	7	8 28.8	1 8	8 15.0	9	8 28.8	1 8	8 15.0	9															
33°	2	2	0	0	8	8	3	5	1 39	10.1	8	4	23.9	3 19	4	9	5	2	4 58	7 10.0	6	6	5 637	14.0	11.0	6 27.9	8 15	3 12.1	6 27.9	8 15	3 12.1																
34°	0	20.9	0	0	9.1	7.0	1	2	1 41	4	8.0	2	6	3 22	8	9.1	3 24.9	5 2	13.1	2	4	3	6 43	4	2	5	6	8 22	6	3	5	6	8 22	6	3												
35°	22.8	6	0	0	4	2	23.9	21.9	1 42	8	2	0	3	3 25	12.1	3	1	6	5 7	4	4	2	0	6 49	7	4	3	3	8 30	16.0	5	3	3	8 30	16.0	5											
36°	6	2	0	0	8	4	7	6	1 44	11.1	4	24.8	22.9	3 28	5	5	25.9	3 512	8	6	0 25.7	6 56	15.1	6	1	0 839	4	7	1 24.9	9 43	19.0	14.1															
37°	4	19.9	0	0	10.1	6	5	2	1 46	5	7	6	6	3 32	8	7	7	0 517	14.1	8	26.8	3 7 3	5	9	27.9	26.7	8 45	8	9	27.9	26.7	8 45	8	9													
38°	2	5	0	0	5	8	3	20.9	1 48	9	9	4	2	3 36	13.2	9	5 23.6	5 23	5 11.0	5	0 7 11	9 12.1	6	4	8 58	17.2	13.1	6	4	8 58	17.2	13.1	6														
39°	0	1	0	0	9	8.0	1	5	1 50	12.3	9.1	1 21.9	3 40	6 10.2	2	3	5 29	9	2	3 24.6	7 19	16.3	3	4	1 9 8	6	4	2 1 9 8	6	4	2 1 9 8	6	4														
40°	21.7	18.7	0	0	11.3	3	22.8	1	1 52	7	4	23.9	5	3 44	14.0	4	0 22.9	5 36	15.4	5	1	3 7 27	7	6	2 22.5	9 19	18.0	6	2 22.5	9 19	18.0	6															
41°	5	3	0	0	7	5	6	19.7	1 54	13.1	6	7	1	3 49	5	7	24.8	5 543	8	7	25.8	23.9	7 37	17.2	8	26.9	3 930	5	9	2 24.9	9 43	19.0	14.1														
42°	2	17.8	0	0	12.2	8	3	2	1 57	6	8	4	20.6	3 54	9	9	5	0 550	16.3	12.0	6	5	7 47	6 13.1	7	24.9	9 43	19.0	14.1	7	24.9	9 43	19.0	14.1													
43°	0	4	0	0	6	9.0	0	18.8	2 0	14.0	10.1	1	2	3 59	15.4	11.2	2 21.6	5 59	8	3	3	0 7 58	18.1	3	4	5 956	5	4	2 0 10 11	20 1	7	2															
44°	20.7	16.9	0	0	13.1	3	21.8	3	2 3	5	4	22.9	19.7	4 5	9	5	0	1 6	8 17.3	5	1 22.6	8 9	7	6	2	0 10 11	20 1	7	2	0 10 11	20 1	7															
45°	4	3	0	0	7	6	5	17.8	2 6	15.1	7	6	2	4 12	16.5	8	23.7	20.6	6 17	9	8	24.8	1 8 22	19.2	9	25.9	23.6	10 27	6 15.0	9	25.9	23.6	10 27	6 15.0													
46°	1	15.8	0	0	14.2	9	2	3	2 9	6 11.0	3	18.7	4 19	17.1	12.1	4	1	6 28	18.4	13.1	5	21.7	8 36	8 14.2	6	2 10 44	21 2	3	1 22.7	11 3	8	6															
47°	19.8	3	0	0	7	10.2	20.9	16.8	2 13	16.1	3	0	2	4 26	7	4	1 19.6	6 39	19.0	5	2	2 8 51	20.4	5	3 22.7	11 3	8	6	3 22.7	11 3	8	6															
48°	4	14.7	0	0	15.3	6	6	2	2 18	7	7	21.7	17.6	4 35	18.3	7	22.8	1	6 52	6	8	23.9	20 7	9 8 21.1	9	0	2 11 23	22.5	9	0	2 11 23	22.5	9														
49°	1	0	0	0	16.0	9	3	15.6	2 22	17.4	12.0	4	0	4 44	9 13.1	5	18.5	7	6 20.3	14.2	6	1	9 27	8 15.2	24.7	21 7	11 47	23 2	16.3	24.7	21 7	11 47	23 2	16.3													
50°	18.7	13.4	0	0	6	11.3	19.9	14.9	2 27	18.1	4	0	16.4	4 55	19.6	4	1 17.9	7 22	21.0	5	2 19.5	9 48	22.5	6	3	1 12 12	9	7	3	1 12 12	9	7															
51°	3	12.7	0	0	17.3	7	5	2	2 33	8	8	20.6	15.7	5 7	20.4	8	21.7	2	7 39	8	9	22.8	18 8	10 11	23 3 16.0	23 9	20 5	12 41	24.7	17.0	23 9	20 5	12 41	24.7	17.0												
52°	17.9	11.9	0	0	18.1	12.1	1	13.4	2 40	19.6	13.2	2	14.9	5 20	21.2	14.2	3 16.5	7 59	22.6	15.3	4	1 10 37	24 1	4	5 19 8	13 14	25.6	4	5 19 8	13 14	25.6	4															
53°	5	0	0	0	19.0	5	18.7	12.5	2 48	20.5	6	19.8	1	5 35	22.1	7	20 9	15.7	8 22	23.5	8	0	17.3	11 8 25.0	8	1	0 13 51	26.5	9	1	0 13 51	26.5	9														
54°	0	10.0	0	0	20.0	13.0	2	11.6	2 57	21.5	14.1	3	13.2	5 53	23.1	15.2	4 14.8	8 48	24 5	16.3	21 5	16.4	11 42	26 0	17 3	21 5	18 1	14 34	27 5	18 4	21 5	18 1	14 34	27 5	18 4												
55°	16.5	9.0	0	0	21.0	5	17.7	10.6	3 7	22.6	6	18.8	12.2	6 11	21.1	7	19.9	13.9	9 19	25.6	8	0	15.5	12 23	27.1	8	1 17 2	15 24	28.6	9	1 17 2	15 24	28.6	9													
56°	15.9	7.9	0	0	22.1	14.1	1	9.5	3 20	23.8	15.2	2	11.1	6 39	25.3	16.3	3 12.9	9 56	26 8	17.3	20 4	14.5	13 11	28 3 18 4	21 5	16 2	16 22	29 8	19 5	21 5</																	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S. SID. T. 18 21 47 ARC 275° 26'.9					H. M. S. 18 26 9 276° 32'.2					H. M. S. 18 30 30 277° 37'.4					H. M. S. 18 34 50 278° 42'.6					H. M. S. 18 39 11 279° 47'.7					H. M. S. 18 43 31 280° 52'.8							
18 21 47 5°					18 26 9 6°					18 30 30 7°					18 34 50 8°					18 39 11 9°					18 43 31 10°							
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3			
Lat.	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°				
22	0.4	0.2	7 11	12.2	10.2	1.5	1.5	8 37	13.4	11.2	2.6	2.8	10 3	14.6	12.3	3.7	4.1	11 28	15.8	13.3	4.8	5.4	12 54	17.0	14.4	5.9	6.7	14 18	18.2	15.4		
23	3	1	7 16	5	4	4	3	8 43	7	4	4	6 10	9	9	5	5	3.9	11 36	16.1	5	6	2 13	2	3	5	7	5 14	28	4	5		
24	129.9	7 21	7	5	2	1	8 49	9	6	3	4 10	16	15.1	6	4	8 11	43	3	6	5	1 13	10	5	7	6	4 14	37	7	7			
25	0	7	7 26	13.0	7	1	0.9	8 55	14.2	7	1	3 10	23	4	8	2	6 11	51	6	8	3	4.9	13 19	8	8	4	2 14	47	19.0	8		
26	29.8	5 7 31	2	8	0.9	7	9 1	5	9	0	1 10	30	7	9	1	4 12	0	9 14.0	2	7 13	29	18.1	15.0	5.3	0 14	57	3 16.0					
27	7	3	7 36	5 11.0	7	5 9 7	7	12.1	1.8	1.9	10 38	16.0	13.1	2.9	2 12	8	17.2	1	0	5 13	38	4	2	1	5.9	15	8	6	2			
28	5	0	7 42	8	2	6	3	9 14	15.0	2	7	7 10	46	3	3	8	0 12	17	5	3	3.9	4 13	48	7	3	0	7 15	19	9	4		
29	328.8	7 48	14.1	3	4	1	9 21	3	4	5	5 10	54	5	4	6	2.8	12	27	8	5	7	2 13	59	19.0	5	4.8	5 15	30	20.2	5		
30	2	6	7 54	4	5	3 29.9	9 29	6	6	4	2 11	3	8	6	5	6 12	36	18.1	7	6	0 14	10	3	7	7	3 15	43	5	7			
31	0	4	8 1	7	7	1	7	9 36	9	8	2	0 11	12	17.1	8	3	4 12	47	4	8	4	3.8	14 21	6	9	5	1 15	55	8	9		
32	28.8	1 8 8	15.0	9 29.9	5 9 44	16.2	9	0	0.8	11 21	5 14.0	1	2 12	57	7	15.0	2	6 14	33	9 16.1	3	4.9	16	9 21.1	17.1							
33	6 27.9	8 15	3 12.1	7	2 9 53	6 13.1	0.8	6 11	31	8	2	1.9	0 13	9 19.0	2	0	3 14	46	20.3	3	2	7 16	23	5	3							
34	5	6	8 22	6	3	5	0 10	2	9	3	6	4 11	42	18.2	4	7	1.7	13 21	4	4	2.9	1 14	59	7	5	0	5 16	37	9	5		
35	3	3	8 30	16.0	5	3 28.7	10 12	17.3	5	4	1 11	53	6	6	6	5 13	33	8	6	7	2.9	15 13	21.0	7	3.8	3 16	53	22.3	7			
36	1	0	8 39	4	7	1	4 10	22	7	7	2 29.8	12 4	9	8	4	2 13	46	20.2	8	5	6 15	28	4	9	6	0 17	9	7	9			
37	27.9	26.7	8 48	8	9 28.9	1 10	33	18.1	14.0	0	5 12	17	19.3	15.0	2	0.9	14	1	6 16.1	3	4 15	44	8 17.1	4	3.8	17	26	23.1	18.1			
38	6	4	8 58	17.2	13.1	7 27.8	10 44	5	2 29.8	2 12	30	7	2	0	6 14	16	21.0	3	1	1 16	0	22.3	3	2	5 17	45	5	3				
39	4	1	9 8	6	4	5	5 10	56	9	4	6 28.9	12 44	20.2	5	0.7	3 14	32	4	5	1.9	1.8	16	18	7	5	0	2 18	4 24.0	6			
40	225.7	9 19	18.0	6	3	2 11	9 19.3	7	4	6 12	59	6	7	5	0 14	49	9	7	7	5 16	37	23.2	8	2.8	0 18	25	4	8				
41	26.9	3 9 30	5	9	0 26.8	11 23	8	9	2	2 13	15	21.1	16.0	3 29.7	15	7 22.4	17.0	5	1 16	57	7 18.0	6	2.7	18	47	9 19.1						
42	7 24.9	9 43	19.0	14.1	27.8	4 11	38	20.3	15.2	28.9	27.8	13 32	6	2	0	3 15	26	9	3	3	0.8	17	19	24.2	3	4	4 19	11	25.4	3		
43	4	5	9 56	5	4	5	0 11	54	8	4	6	4 13	51	22.1	5	29.8	28.9	15 47	23.4	5	0	4 17	42	7	6	1	1 19	37	26.0	6		
44	2	0	10	11	20.1	7	3 25.5	12 11	21.4	7	4	0 14	11	7	8	6	5 16	10	24.0	8	0.7	0 18	8	25.3	9	1.9	1.7	20	5	5	9	
45	25.9	23.6	10 27	6 15.0	0	1 12	30	22.0	16.0	1	26.6	14	33	23.3	17.1	3	1 16	34	6 18.1	4 29.6	18 35	9 19.2	6	3 20	34	27.1	20.2					
46	6	2 10	44	21.2	3	26.7	24.7	12 51	6	3 27.8	2 14	56	9	4	0 27.7	17	1 25.2	4	1	3 19	5	26.5	5	3	0.9	21	7	8	5			
47	3 22.7	11 3	8	6	4	3 13	13	23.2	7	6 25.8	15 22	24.5	7	28.7	3 17	31	9	7 29.8	28.9	19 37	27.2	8	0	5 21	43	28.4	8					
48	0	2 11	23	22.5	9	1 23.8	13 38	9 17.0	3	3 15	51	25.2	18.0	4 26.9	18	3 26.6	19.1	5	5 20	13	9 20.1	0.7	1 22	22	29.1	21.1						
49	24.7	21.7	11 47	23.2	16.3	25.7	3 14	5 24.6	3 26.9	24.8	16 23	9	4	0	4 18	38	27.3	4	2	0 20	52	28.6	5	4	29.7	23	5	9	5			
50	3	1 12	12	9	7	4 22.7	14	36	25.3	7	6	3 16	58	26.6	8 27.7	25.9	19 18	28.0	8 28.8	27.5	21 36	29.3	8	0	2 23	52	0.6	9				
51	23.9	20.5	12 41	24.7	17.0	0	1 15	10	26.1	18.1	2 23.7	17 37	27.4	19.1	3	3 20	2	8 20.2	5 26.9	22 25	0.1	21.2	29.6	28.7	24 45	1.4	22.2					
52	5 19.8	13 14	25.6	4	24.6	21.4	15 48	27.0	5 25.8	0 18	21	28.3	5 26.9	24.7	20 51	29.7	6	1	3 23	19	1.0	6	2	1 25	45	2.3	6					
53	1	0 13	51	26.5	9	2 20.6	16 32	9	9	4 22.3	19 12	29.3	20.0	5	0 21	47	0.6	21.0	27.7	25.6	24 21	9 22.1	28.8	27.4	26 52	3.2	23.1					
54	22.6	18.1	14 34	27.5	18.4	23.8	19.8	17 23	28.9	19.4	24.9	21.5	20	9	0.3	5	1 23.2	22	52	1.7	5	2 24.9	25 32	2.9	6	4 26.7	28	8	4.2	6		
55	1 17.2	15 24	28.6	9	3 18.9	18 22	Π	20.0	4 20.6	21	16	1.4	21.0	25.6	22.4	24	6	2.8	22.0	26.7	1 26	53	4.1	23.1	0 25.9	29 35	5.4	24.1				
56	21.5	16 22	29.8	19.5	22.8	17.9	19 30	1.2	5	23.8	19.6	22 34	2.6	6	1 21.5	25 33	4.0	6	1 23.2	28	27	5.4	6	27.5	0	1 16	6.7	7				

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

### UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.																	
SID. T. 18 47 51					18 52 11					18 56 30					19 0 49					19 5 8																	
ARC 281° 57'.8					283° 27.7					284° 7.5					285° 12'.3					286° 16'.9																	
11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3													
Lat.	mm	ss	ss	ss	mm	ss	ss	ss	ss	mm	ss	ss	ss	ss	mm	ss	ss	ss	ss	mm	ss	ss	ss	ss													
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°													
22	7.0	8.0	15	43	19.3	16.4	8.1	9.3	17	7	20.5	17.4	9.2	10.6	18.3	31	21.7	18.4	10.3	11.9	19.5	22.8	19.4	11.4	13.2	21.1	17.23.9	20.4	12.5	14.5	22.3	19.25.1	21.4				
23	6.8	7.8	15	53	6	5	7.9	1	17	18	8	6	0	5	18	43	9	6	1	8	20	7	23.1	6	3	1	21	30	24.2	6	4	4	22	53	4	6	
24	7	7	16	3	9	7	8	0	17	29	21.1	7	8.9	3	18	55	22.2	7	0	6	20	20	4	7	1	0	21	44	5	8	2	3	23	8	7	8	
25	5	5	16	14	20.2	9	6	8.9	17	41	4	9	8	2	19	7	5	9	9.9	5	20	33	7	9	0	12.5	21	58	8	9	1	2	23	23	26.0	9	
26	4	4	16	25	5	17.0	5	7	17	53	7	18.0	6	0	19	20	8	19.1	7	11.4	20	47	24.0	20.1	10.9	7	22	13	25.1	21.1	0	1	23	39	3	22.1	
27	6.2	2	16	37	8	2	7.4	6	18	6	22.0	2	5	9.9	19	34	23.1	2	6	2	21	1	3	2	7	6	22	29	4	3	11.8	0	23	55	6	3	
28	1	0	16	49	21.1	4	2	4	18	19	3	4	8.3	7	19	48	4	4	5	1	21	16	6	4	6	5	22	45	8	4	7	13.5	24	12	9	4	
29	0	6.9	17	2	4	6	1	2	18	33	6	6	2	6	20	3	7	6	9.3	0	21	32	9	6	4	12.3	23	1	26.1	6	6	7	24	29	27.2	6	
30	5.8	7	17	15	7	7	6.9	0	18	47	9	7	0	4	20	18	24.1	8	1	10.8	21	49	25.3	8	10.3	2	23	18	4	8	4	6	24	48	6	8	
31	6	5	17	29	22.0	9	7	7.9	19	2	23.2	9	7.9	2	20	31	4	20.0	0	6	22	6	6	21.0	1	0	23	37	7	22.0	11.3	4	25	7	9	23.0	
32	5	3	17	43	4	18.1	6	7	19	17	6	19.1	7	1	20	51	8	2	8.8	5	22	24	9	2	0	11.9	23	56	27.1	2	1	13	3	25	27	28.3	2
33	3	1	17	58	7	3	4	5	19	34	9	3	5	8.9	21	8	25.1	4	7	3	22	42	26.3	4	9.8	7	24	15	5	4	0	1	25	48	6	4	
34	1	5.9	18	14	23.1	5	3	3	19	51	24.3	5	4	7	21	27	5	6	5	1	23	2	7	6	6	6	6	24	36	9	6	10.8	0	26	10	29.0	6
35	4.9	7	18	31	5	7	1	1	20	9	7	7	2	5	21	47	9	8	3	0	23	23	27.1	8	5	4	24	58	28.3	8	6	12.8	26	33	4	8	
36	7	5	18	49	9	9	5.9	6.9	20	28	25.1	9	0	3	22	7	26.3	21.0	1	9.8	23	45	5	22.0	3	2	25	22	7	23.0	4	6	26	58	9	24.0	
37	5	2	19	8	24.3	19.2	7	7	20	49	5	20.2	6.8	1	22	29	8	2	7.9	6	24	8	9	2	1	0	25	46	29.1	2	3	5	27	23	0.3	2	
38	3	0	19	28	8	4	5	4	21	10	26.0	4	6	7.9	22	52	27.2	4	8	4	24	33	28.4	4	8.9	10.8	26	12	6	4	1	3	27	51	7	4	
39	1	4.7	19	49	25.2	6	3	2	21	33	4	6	4	7	23	16	7	6	6	2	24	59	8	7	7	6	26	40	Π	7	9.9	1	28	20	1.2	7	
40	3.9	5	20	12	7	8	1	0	21	57	9	9	2	5	23	42	28.1	9	4	0	25	26	29.3	9	5	5	27	9	0.5	9	7	0	28	51	7	9	
41	7	2	20	36	26.2	20.1	4.9	5.7	22	24	27.4	21.1	0	2	24	10	6	22.1	2	8.8	25	56	5	23.1	3	3	27	41	1.0	24.2	5	11.8	29	24	2.2	25.2	
42	5	3.9	21	2	7	4	7	4	22	52	9	4	5.8	6.9	24	40	29.1	4	0	5	26	28	0.4	4	1	1	28	14	6	4	3	5	29	59	7	4	
43	3	6	21	30	27.2	6	4	1	23	22	28.5	6	6	6	6	25	12	7	7	6.7	2	27	2	9	7	7.9	9	8	28	50	2.1	7	1	3	36	3.3	7
44	0	3.2	2	0	8	9	2	4.8	23	54	29.1	9	3	3.2	47	0.3	9	5	7.9	27	38	1.5	24.0	6	5	29	28	7	25.0	8.8	1	1	16	9	26.0		
45	2.8	2.9	22	33	28.4	21.2	3.9	5	24	29	7	22.2	0	0	26	24	9	23.2	2	6	28	18	2.1	3	4	2	0	10	3.3	3	5	10.8	2	0	4.5	3	
46	5	5	23	8	29.0	5	6	2	25	7	0.3	5	4.8	5.7	27	5	1.5	5	5.9	3	29	0	8	6	1	8.9	0	54	40	6	3	6	24	6	5.2	6	
47	2	1	23	46	7	8	3	3.8	25	48	1.0	9	5	4	27	48	2.2	9	6	0	29	47	3.4	9	6.8	6	1	43	7	9	0	3	33	7.9	9		
48	1.8	1.7	24	28	0.1	22.2	0	4	26	33	7	23.2	2	0	28	36	9	24.2	3	6.7	0	37	4.1	25.2	5	3	2	35	5.4	26.2	7.7	0	4	32	6.6	27.2	
49	5	3	25	15	1.1	5	2.7	0	27	23	2.4	5	3.9	4.6	29	28	3.6	6	0	3	1	32	8	6	2	0	3	33	6.1	6	4	9.7	5.32	7.3	6		
50	2	0.8	26	6	9	9	4	2.5	28	18	3.2	9	6	2	0	26	4.4	9	4.7	5.9	2	33	5.6	9	5.9	7.6	4	37	9	9	9	1	3	6	38	8.1	9
51	0.8	3	27	3	2.7	23.3	1	0	29	18	4.0	24.3	2	3.7	1	31	5.2	25.3	3	5	3	40	6.5	26.3	6	2	5	47	7.7	27.3	6.8	8.9	7.50	9	28.3		
52	5	29.7	28	7	3.6	7	1.7	1.5	0	26	9	7	2.8	2	24	2	6.1	7	0	0	4	55	7.4	7	2	6.8	7	4	8.6	7	4	5	9	10	9.8	7	
53	1	1	29	18	4.6	24.1	3	0.9	1	42	5.8	25.1	4	2.6	4	2	7.1	26.1	3.7	4.5	6	18	8.3	27.1	4.8	3	8	30	9.6	28.1	0	0	10	39	10.5	29.1	
54	29.7	28.4	0.40	5.6	6	0.9	2	3	8	6.8	6	0	0	5	32	8.2	6	3	3.9	7	51	9.3	6	4	5.7	10	7	10.6	6	5.6	7	5	12	19	11.8	6	
55	2.2	7.7	213	6.7	25.1	4	29.5	4.46	8.0	26.1	1.6	1.3	7	14	9.2	27.1	2.8	2	9	37	10.5	28.1	0	1	11	56	11.7	29.1	2	6.9	14	10	12.9	0.1			
56	28.7	26.9	4	0	8.0	7	29.8	28.7	6.38	9.2	7	1	0.5	9	10	10.4	7	2	2.4	11	38	11.8	7	3.5	4	4	13	59	13.0	7	4.8	3	16	15	14.1	7	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																												
SID. T.	19 9 26	19 13 44	19 18 1	19 22 18	19 26 34	19 30 49																																
ARC	287° 21'.5	16°	288° 23'.9	289° 30'.2	290° 34'.4	291° 38'.4	292° 42'.4																															
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3																		
Lat.	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ																		
22°	12.5	14.5	22	39	25.1	21.4	13.6	15.8	24	1	26.2	22.4	14.8	17.1	25	22	27.3	23.4	15.9	18.4	26	43	28.4	24.4	17.0	19.7	28	3	29.5	25.4	18.1	21.1	29	23	0.6	26.4		
23	4	4	22	53	4	6	5	7	24	16	5	6	6	0	25	38	6	6	8	4	26	59	7	6	16.9	7	28	20	8	6	0	0	29	41	9	5		
24	2	3	23	8	7	8	4	6	24	31	8	8	5	16.9	25	54	9	7	6	3	27	16	29.0	7	8	6	28	38	0.1	7	17.9	20.9	29	59	1.2	7		
25	1	2	23	23	26.0	9	2	5	24	47	27.1	9	4	9	26	11	28.2	9	5	2	27	34	3	9	6	5	28	56	4	9	8	9	0	18	5	9		
26	0	1	23	39	3	22.1	1	15.4	25	4	4	23.1	14.3	8	26	28	5	24.1	15.4	1	27	52	6	25.1	5	5	29	15	7	26.1	7	8	0	37	8	27.0		
27	11.8	0	23	55	6	3	0	3	25	21	7	3	1	7	26	46	9	3	3	0	28	10	Π	2	16.4	19.4	29	34	1.1	2	5	7	0	58	2.2	2		
28	7	13.8	24	12	9	4	12.8	2	25	38	28.0	4	0	6	27	4	29.2	4	1	17.9	28	30	0.3	4	3	3	29	55	4	4	4	17.4	7	119	5	4		
29	6	7	24	29	27.2	6	7	1	25	57	4	6	13.8	16.5	27	24	5	6	0	8	28	50	6	6	1	2	0	16	7	6	3	20.6	140	9	6			
30	4	6	24	48	6	8	5	14.9	26	16	7	8	7	3	27	44	8	8	14.8	7	29	11	1.0	8	0	1	0	38	2.1	8	1	5	2	3	3.2	7		
31	11.3	4	25	7	9	23.0	4	8	26	36	29.1	24.0	5	2	28	5	0.2	25.0	7	6	29	33	3	26.0	15.8	0	1	0	5	9	0	4	227	6	9			
32	1	13.3	25	27	28.3	2	12.2	7	26	57	4	2	4	1	28	27	5	2	5	5	29	56	7	2	7	18.9	1	24	8	27.1	16.8	4	252	9	28.1			
33	0	1	25	48	6	4	1	6	27	20	8	4	2	0	28	50	9	4	4	17.4	0	20	2.1	4	5	8	1	49	3.2	3	7	20.3	3	18	4.3	3		
34	10.8	0	26	10	29.0	6	0	14.4	27	43	0.2	6	1	15.9	29	15	1.3	6	14.2	3	0	46	5	6	4	7	2	16	6	5	5	2	345	7	5			
35	6	12.8	26	33	4	8	11.9	3	28	7	6	8	12.9	7	29	40	7	8	1	2	1	12	9	8	2	6	243	4.0	7	4	1	4	13	5.1	7			
36	4	6	26	58	9	24.0	7	1	28	33	1.0	25.0	7	6	0	7	2.2	26.0	0	1	1	40	3.3	27.0	0	5	3	12	4	9	16.2	0	443	6	9			
37	3	5	27	23	0.3	2	5	0	29	0	5	2	5	4	0	35	6	2	13.8	16.9	2	9	7	2	14.9	18.4	3	43	9	28.2	1	19.9	5	15	6.0	29.2		
38	1	3	27	51	7	4	3	13.8	29	28	9	4	4	15.3	1	5	3.1	4	6	8	2	40	4.2	4	8	3	4	15	5.3	4	0	8	548	5	4			
39	9.9	1	28	20	1.2	7	1	6	29	59	2.4	7	2	1	1	37	5	7	4	6	3	13	7	6	6	2	4	49	8	6	15.8	7	623	7.0	6			
40	7	0	28	51	7	9	10.9	5	0	31	9	9	0	0	2	10	4.0	9	2	5	3	48	5.2	9	4	0	525	6.3	9	6	6	7	0	5	8			
41	5	11.8	29	24	2.2	25.2	7	3	1	6	3.4	26.2	11.8	14.8	2	46	5	27.1	0	3	4	25	7	28.1	2	17.9	6	3	8	29.1	4	19.5	7	39	8.0	0.1		
42	3	5	29	59	7	4	5	1	1	42	9	4	6	6	3	24	5.1	4	12.8	1	5	4	6.2	4	0	7	6	43	7.4	4	2	4	821	5	3			
43	1	3	0	36	3.3	7	2	12.9	2	21	4.5	7	4	4	4	4	5	7	7	6	15.9	5	46	8	7	13.8	5	727	8.0	6	0	3	9	5	9.1	6		
44	8.8	1	1	16	9	26.0	0	7	3	3	5.1	27.0	1	2	4	48	6.3	28.0	3	7	6	31	7.4	9	5	4	813	6	9	14.8	1	953	7	9				
45	5	10.8	2	0	4.5	3	9.7	4	3	48	7	3	10.9	0	5	35	9	3	1	5	7	20	8.0	29.2	3	3	9	3	9.2	0.2	6	18.9	1044	10.3	1.2			
46	3	6	2	46	5.2	6	4	2	4	37	6.4	6	7	13.8	6	25	7.5	6	11.9	3	8	12	7	5	1	1	9	56	8	5	3	7	1138	11.0	5			
47	0	3	3	37	9	9	2	11.9	5	29	7.0	9	4	6	7	19	8.2	9	7	1	9	8	9.4	8	12.9	16.9	10	53	10.5	8	1	5	12	37	6	8		
48	7.7	0	4	32	6.6	27.2	8.9	6	6	2	26	7	28.2	1	3	8	18	9	29.2	4	14.9	10	8	10.1	0.2	6	1	7	11	55	11.2	1.1	13.8	3	13	41	12.3	2.1
49	4	9.7	5	32	7.3	6	6	3	7	28	8.5	5	9.8	0	9	22	9.6	5	1	7	11	14	8	5	3	5	13	2	9	5	5	1	14	49	13.1	5		
50	1	3	6	38	8.1	9	3	0	8	36	9.2	9	5	12.7	10	32	10.4	9	10.8	4	12	25	11.6	9	0	2	14	16	12.7	9	2	17.9	16	4	8	8		
51	6.8	8.9	7	50	9	28.3	0	10.6	9	51	10.1	29.3	2	4	11	49	11.2	0.3	5	1	13	44	12.4	1.3	11.7	15.9	15	36	13.5	2.2	12.8	7	17	25	14.6	3.2		
52	4	5	9	10	9.8	7	7.6	2	11	14	11.0	7	8.9	0	13	13	12.1	7	1	13.8	15	10	13.3	7	4	6	17	3	14.4	6	5	4	18	53	15.5	6		
53	0	0	10	39	10.8	29.1	3	9.8	12	45	9	0.1	5	11.6	14	46	13.1	1.1	9.7	5	16	45	14.2	2.1	0	3	18	39	15.3	3.0	2	1	20	30	16.5	4.0		
54	5.6	7.5	12	19	11.8	6	6.9	3	14	26	12.9	6	1	2	16	29	14.1	6	3	1	18	29	15.2	6	10.6	0	20	25	16.4	5	11.8	16.8	22	17	17.5	5		
55	2	6.9	14	10	12.9	0.1	4	8.8	16	19	14.0	1.1	7.7	10.7	18	24	15.2	2.1	8.9	12.7	20	25	16.3	3.1	2	14	6	22	22	17.5	4.0	4	5	24	15	18.6	5.0	
56	4.8	3	16	15	14.1	7	0	2	18	27	15.2	7	3	2	20	33	16.4	6	5	2	22	35	17.5	6	9.8	2	24	33	18.7	5	0	1	26	26	19.8	5		

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

### UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S				H. M. S				H. M. S				H. M. S				H. M. S				H. M. S							
SID. T. 19 35 5				19 39 19				19 43 33				19 47 47				19 51 59				19 55 12							
ARC 293° 46' 2				22°				23°				24°				25°				26°							
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3		
Lat.	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ			
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°			
22	19.3	22.4	0.42	1.7	27.4	20.4	23.7	2	1	2.8	28.3	21.5	25.0	3.19	3.8	29.3	22.7	26.3	4.36	4.9	0.3	23.8	27.5	5.53	6.0		
23	2	3	1	1	2.0	5	3	6	220	3.1	5	4	24.9	3.38	4.2	5	6	2	4.56	5.2	4	7	5	6.13	3		
24	0	3	1	20	3	7	2	6	2.39	4	7	3	9	3.58	5	6	5	2	5.17	5	6	6	5	6.35	6		
25	18.9	2	1	39	6	8	1	5	3	0	7	8	2	9	4.19	8	8	4	2	5.38	9	8	5	5	6.57	9	
26	8	22.2	1	59	9	28.0	19.9	5	320	4.0	29.0	1	8	4.41	5.1	ℳ	22.2	26.2	6	0	6.2	9	23.4	5	7.19	7.2	
27	7	1	220	3.3	2	823.4	342	4	2	0	8	5	3	4	0.1	1	1	6.23	5	1.1	327.5	7.43	6	2.1	24.4	28.8	
28	5	0	242	6	4	7	4	4	4	7	3	20.8	24.8	5.26	8	3	0	1	6.47	9	3	1	4	8.7	9		
29	18.4	0	3	4	4.0	5	6	3	428	5.0	5	7	7	5.50	6.1	5	21.9	1	7.12	7.2	4	0	4	8.32	8.3		
30	3	21.9	328	3	7	19.4	3	452	4	7	6	7	6.15	5	7	726.0	7.37	6	6	22.9	4	8.58	6	6	1	8.10	19
31	1	8	352	7	9	3	2	517	8	9	4	6	6.41	8	8	6	0	8.4	9	8	8	4	9.26	9.0	8	23.9	8.10
32	0	8	418	5.0	29.1	1	23.2	543	6.1	ℳ	0.1	20.3	6	7	8	7.2	1.0	5	0	8.31	8.3	2.0	627.3	9.54	4		
33	17.8	7	445	4	3	0	1	611	5	3	224.5	736	6	2	21.4	25.9	9	1	7	2	5	310	24	8	2	7	71146
34	721.6	513	8	5	18.8	0	640	9	5	0	5	8	6	8.0	4	2	9	9.31	9.1	4	22.4	310	55	10.2	4	5	71218
35	5	5	542	6.2	7	7	0	710	7.3	7	19.9	4	837	4	6	1	810	3	5	6	3	31128	6	623.4	71251	7	
36	4	4	613	7	9	522.9	742	8	9	7	4	910	9	820.9	81036	9	8	2	312	2110	8	3	71326	121	7		
37	2	4	645	7.1	ℳ	0.1	4	8	815	8.2	1.1	6	3	944	9.3	2.1	8	81111	10.4	3.0	027.2	1238	5	4.0	228.7	143	
38	021.3	720	6	3	2	7850	7	3	424.2	1020	8	3	625.7	1148	9	2	21.9	21315	9	2	0	71441	130	5.1			
39	16.9	2756	8.1	6	0	7927	9.2	5	19.2	21058	10.3	5	5	71227	11.3	5	7	21355	12.4	4	22.9	71521	5	4			
40	7	1834	6	8	17.9	610	6	7	8	1	11138	8	7	3	6137	8	7	5	11436	9	7	7	616	314.0	6		
41	5	0914	9.1	1.1	722.5	1048	10.2	2.0	0	01220	11.3	3.0	1	61351	12.4	9	327.1	1520	13.4	9	5	01648	5	9			
42	320.8	957	6	3	5	41132	7	3	18.8	0134	8	3	19.9	25.5	1436	9	4.2	1	116	614.0	5.1	428.6	1735	151			
43	1	71043	10.2	6	4	31218	11.3	6	623.9	1352	12.4	5	7	51525	13.5	5	20.9	01656	6	4	2	61825	7	4			
44	15.9	61131	8	9	2	2138	9	8	4	81443	13.0	8	5	41616	14.1	8	8	01748	152	7	0	61918	16.3	7			
45	7	41224	11.4	2.2	0	114	112.5	3.1	1	71537	6	4.1	3	31711	7	5.1	626.9	1843	8	6	21.8	62014	9	7.0			
46	420.3	1319	12.1	5	16.8	21.9	1458	13.2	4	17.9	61635	14.2	4	125.2	1810	15.3	4	4	91943	16.4	3	5	52114	17.5	3		
47	2	21419	7	8	6	81559	8	7	7	51737	9	7	189	21912	16.0	7	2	82046	17.1	6	328522	1818	18.2				
48	0	11524	13.4	3.1	3	7174	14.5	4.1	523.4	1843	15.6	5.0	6	12020	7	60	0	82154	8	9	1	52327	9	9			
49	14.7	19.9	1633	14.2	4	0	51815	15.3	4	2	31955	16.3	4	4	02132	17.4	3	19.7	26.7	23	7185	72209	52440	19.6			
50	4	71749	9	8	15.7	21.4	1932	16.0	7	16.9	22112	17.1	7	124.9	2250	18.2	6	4	72426	19.3	6	6	42559	20.3	5		
51	1	51911	15.7	4.2	4	32055	8	5.1	6	12236	9	6.1	17.8	82415	19.0	7.0	1	62551	20.1	9	3	42724	211	9			
52	13.8	32041	16.6	6	1	12225	17.7	5	322.9	247	18.8	5	5	72546	9	4	18.8	52722	9	8.3	02832856	9	9.3				
53	4	12218	17.6	5.0	14.8	20.9	243	18.7	9	15.9	72546	19.7	9	2	62725	20.8	8	526.4	291218	8	19.7	3035228	7				
54	118.8	246	18.6	4	4	72551	19.7	6.4	6	52733	20.7	7.3	16.9	24429	13218	8.3	2	3049228	9.2	4	2	222238	10.1	6			
55	12.7	526	419.7	9	13.9	42750	20.7	9	2	32932	21.8	8	5	311022.9	7	17.8	3246239	7	1	241924.9	6						
56	3	22815	20.9	6.4	5	10	021.9	7.4	14.8	1	14123.0	8.3	1	1	319210	9.2	5	245425.0	10.2	18.7	2625261	11.1					

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.		H. M. S.																					
SID. T.	19 56 12	20 0 23	20 4 34	20 8 44	20 12 54	20 17 3																									
ARC	299° 2' 9	300° 5' 8	301° 8' 5	302° 11' 1	303° 13' 4	304° 15' 6																									
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3						
Lat.	ω	κ	λ	π	ω	ω	ψ	λ	π	ω	ω	ψ	λ	π	ω	ω	ψ	λ	π	ω	ω	ψ	λ	π	ω	ω	ψ	λ	π	ω	
22°	24.9	28.8	7 9	7.0	2.2	26.1	0.1	8 24	8.0	3.2	27.2	1.4	9 38	9.1	4.1	28.4	2.7	10 52	10.1	5.1	29.5	4.0	12 5	11.1	6.0	0.7	5.2	13 18	12.1	7.0	
23	8	8 7	30	3 4	0	1	8 45	3	3	1	4 10	1	4	3	3	7 11	15	4	2	4	0 12	28	4	2	6	3 13	41	4	1		
24	7	8 7	52	6 5	25.9	1	9 8	6	5	0	4 10	23	7	4	2	7 11	38	7	4	3	0 12	52	7	4	5	3 14	6	8	3		
25	6	8 8	14	9 7	8	1	9 31	9	7	26.9	4 10	47	10.0	6	1	7 12	2 11.1	5	2	1 13	17	12.1	5	4	3 14	31	13.1	5			
26	5	8 8	37	8.2	9	7	1	9 55	9.2	8	8	4 11	11	3	8	0	2.8	12 27	4	7	1	1 13	42	4	7	0.3	5.4	14 56	4	6	
27	24.4	28.8	9 1	5 3.0	6	0.1	10 19	5	4.0	7	1.5	11 36	6	9	27.9	8 12	53	7	9	0	4 1	14 8	7	8	2	4 15	23	8	8		
28	3	8 9	26	9 2	5	1	10 45	9	2	6	5 12	2 11.0	5.1	8	8	8 13	19	12.1	6.0	28.9	2 14	35	13.1	7.0	1	5 15	51	14.1	8.0		
29	2	8 9	52	9.3	4	25.3	1 11	11	10.3	3	5	5 12	29	4	3	7	8 13	47	4	2	8	2 15	3	4	2	0	5 16	19	5	1	
30	1	8 10	19	7 6	2	1	11 39	7	5	26.4	5 12	57	8	5	6	2.9	14 15	8	4	7	2 15	32	8	4	29.9	5.6	16 49	8	3		
31	23.9	8 10	47	10.1	7	1	1 12	7	11.1	7	3	5 13	26	12.2	6	5	9 14	45	13.2	6	6	3 16	3 14.2	5	8	6 17	19	15.2	5		
32	8 28.7	11 16	5 9	0 0.1	12 37	5	9	2	1.5	13 57	6	8	27.4	9 15	16	5	8	5	4.3	16 34	6	7	7	7 17	51	6	7				
33	7	7 11	46	9 4.1	24.8	1 13	8	9	5.1	0	5 14	28	13.0	6.0	2	9 15	48	9	7.0	28.4	3 17	6 15.0	9	6	7 18	24	16.0	9			
34	5	7 12	18	11.3	3	7	1 13	40	12.3	3	25.9	5 15	1	4	2	1	3.0	16	21	14.4	2	3	4 17	40	4	8.1	5	5.8	18 59	4	9.0
35	33.4	7 12	51	7 5	6	1	14	14	7	5	8	6 15	36	8	4	0	0 16	56	8	4	2	4 18	16	8	3	29.4	8 19	34	8	2	
36	3	7 13	26	12.1	7	5	1 14	49	13.1	7	7	6 16	12	14.2	6	26.9	0 17	33	15.2	6	1	5 18	53	16.2	5	2	9 20	12	17.2	4	
37	2 28.7	14 3	5 9	24.4	0.1	15 27	6	9	6	1.6	16 49	6	8	7	1 18	11	7	8	0	4.5	19 32	7	7	1	9 20	51	7	7			
38	0	7 14	41	13.0	5.1	2	1 16	5 14.1	6.1	25.4	6 17	29	15.1	7.0	6	1 18	51	16.1	8.0	27.9	6 20	12	17.2	9	0	6.0	21	32	18.2	9	
39	22.9	7 15	21	5 4	1	1 16	46	5	3	3	6 18	10	6	3	4	3.1	19	33	6	2	7	6 20	55	6	9.2	28.8	1 22	15	6 10.1		
40	7	6 16	3 14.0	6 23.9	1	17	29	15.0	6	1	7 18	54	16.1	5	26.3	2 20	17	17.1	5	5	7 21	39	18.1	4	7	1 23	0	19.1	3		
41	5	6 16	48	5 9	7	1 18	15	6	8	24.9	7 19	40	6	8	1	2 21	3	6	7	4	4.7	22	26	6	6	5	2 23	47	7	6	
42	4 28.6	17 35	15.1	6.1	6	0.1	19	2 16.1	7.1	8	1.7	20	28	17.2	8.0	0	2 21	52	18.2	9	2	8 23	15	19.2	9	3	6.3	24	37	20.2	8
43	2	6 18	25	7 4	4	2 19	54	7	4	6	7 21	19	8	3	25.8	3 22	44	7	9.2	0	8 24	7	8 10.2	2	4 25	29	7 11.1				
44	0	6 19	18	16.3	7	2	2 20	46	17.3	6	4	8 22	13	18.4	6	6	3.3	23	39	19.3	5	26.8	9 25	2 20.3	4	1	5 26	25	21.3	4	
45	21.8	6 20	14	9 7.0	0	2 21	43	9	9	2	8 23	11	19.0	9	4	4 24	37	9	7	6	5.0	26	1	9	7 27.9	6 27	23	9	6		
46	5	5 21	14	17.5	3	22.8	2 22	44	18.5	8.2	0	8 24	12	6	9.1	2	4 25	38	20.6	10.0	4	1 27	3 21.6	11.0	7	6.7	28	25	22.6	9	
47	3 28.5	22 18	18.2	6	6	0.2	23	48	19.2	5	23.8	1.8	25	17	20.3	4	0	5 26	43	21.2	3	3	1 28	8 22.2	3	5	8 29	31	23.2	12.2	
48	1	5 23	27	9 9	4	2 24	57	9	8	6	9 26	26	21.0	7	24.8	5 27	53	9	7	1	2 29	18	9	6	3	9 0 41	9	5			
49	20.9	5 24	40	19.6	8.2	2	2 26	11	20.6	9.1	4	9 27	40	7 10.1	6	3.6	29	7 22	6	11.0	25.9	3	0 32	23.6	9	1	7.0	1 55	24.6	8	
50	6	4 25	59	20.3	5	21.9	2 27	31	21.3	5	1	9 29	0 22.4	4	4	4	6 0 26	23.4	3	6	5.4	1 51	24.4	12.3	26.9	1	3 14	25.3	13.2		
51	3	4 27	24	21.1	9	6	2 28	56	22.1	8	22.8	2.0	0 25	23.2	8	1	7 1 52	24.2	7	4	5 3 16	25.2	6	7	2 4 39	26.1	5				
52	0 28.3	28 56	9 9.3	3	0.2	0 27	23.0	10.2	5	0	1 56	24.0	11.2	23.9	8	3 23	25.0	12.1	2	6 4 47	26.0	13.0	4	3 6 10	9	9					
53	19.7	3 0 35	22.8	7	0	2 2	6	9	6	2	1 3 35	9	6	6	9 5 1	9	5	24.9	7 6 25	9	4	2	7.5	7 47	27.8	14.3					
54	4	2 2 22	23.8	10.1	20.7	2	3 3 5	24.9	11.1	21.9	1	5 21	25.9	12.0	3	4.0	6 4 46	26.9	9	6	8 8	9 27.8	8	25.9	7	9 31	28.8	7			
55	1	2 4 19	24.9	6	4	2 5 49	25.9	5	7	2	7 16	26.9	4	0	1 8 40	27.9	13.3	3	6.0	10	2 28.9	14.2	6	9 11	22	29.9	15.1				
56	18.7	2 6 25	26.1	11.1	1	2 7 54	27.0	12.0	3	2 9 20	28.0	9	22.6	2 10	43	29.0	8	0	2 12	4	26	7	3 8.1	13 22	1.0	6					

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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## UPPER MERIDIAN, CUSP OF 10th H.

SID. T.	H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.												
	20	21	21	11	305° 17'.7	20	25	18	306° 19'.5	20	29	25	307° 21'.2	20	33	31	308° 22'.7	20	37	36	309° 24'.0	20	41	41	310° 25'.2								
ARC	3°	3°	3°	3°	3°	4°	5°	5°	6°	7°	7°	8°	8°	8°	8°	8°	8°	8°	8°	8°	8°	8°	8°	8°	8°								
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3			
Lat.	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26			
22°	1.8	6.5	14.30	13.1	7.9	3.0	7.8	15.41	14.1	8.9	4.1	9.1	16.51	15.1	9.8	5.3	10.3	18.1	16.1	10.7	6.4	11.6	19.11	17.1	11.7	7.5	12.8	20.20	18.0	12.6			
23°	7	6.1	14.54	4	8.1	2.9	8.16	5	4	9.0	0	1.17	16	4	10.0	2	4	18.27	4	9	3	6.19	36	4	8	5	9.20	45	4	7			
24°	7	6.15	18	8	2	8	9.16	30	8	2	0	2.17	42	7	1	1	4	18.52	7	11.0	3	7.20	2	7	12.0	4	13.0	21	12	7	9		
25°	6	7.15	44	14.1	4	7	9.16	56	15.1	3	3.9	2.18	8	16.1	3	0	5.19	19	17.1	2	2	8.20	29	18.0	1	3	1.21	39	19.0	13.1			
26°	5	7.16	10	4	6	6	8.0	17.23	4	5	8	3.18	35	4	4	0	6.19	47	4	4	6.1	9.20	57	4	3	3	2.22	7	3	2			
27°	14	6.8	16.37	8	7	2.5	1.17	50	8	7	7	9.4	19	3	8	10.6	4.9	10.7	20.15	7	5	0	12.0	21	26	7	5	7.2	3.22	36	7	4	
28°	3	8.17	5.15.1	9	5	1.18	19	16.1	8	6	4.19	32	17.1	8	8	8.20	44	18.1	7	0	1.21	55	19.1	6	1	4.23	6.20.0	5					
29°	2	9.17	34	5	9.1	4	2.18	48	5	10.0	5	5.20	2	5	9	7	8.21	14	4	9	5.9	1.22	26	4	8	0	13.5	23	37	4	7		
30°	1	9.18	4	8	2	3	2.19	19	8	2	3.4	6.20	32	8	11.1	6	9.21	45	8.12.0	8	8	2.22	57	8.13.0	0	6.24	9	8	9				
31°	0	7.0	18.35	16.2	4	2.2	8.3	19.50	17.2	4	3	9.7	21	4	18.2	3	5.11.0	22	18.19.2	2	7	3.23	30	20.2	1	6.9	7.24	41	21.1	14.1			
32°	0.9	0.19	8	6	6	1	4.20	23	6	5	2	7.21	37	6	5	4.4	1.22	51	6	4	6.12.4	24	4	5	3	8	8.25	15	5	2			
33°	8	1.19	41	17.0	8	0	5.20	57	18.0	7	1	8.22	11	19.0	7	3	2.23	25	20.0	6	5	5.24	39	9	5	7	9.25	51	9	4			
34°	7	1.20	16	4	10.0	1.8	5.21	32	4	9	0	9.22	47	4	8	2	3.24	1	4	8	5.4	7.25	15	21.3	7	6.14.0	26	27	22.3	6			
35°	5	2.20	52	8	2	7	8.6	22	8	8	11.1	2.9	10.0	23	24	8	12.0	1	4.24	39	8.13.0	3	8.25	52	8	9	5	2.26	5	7	8		
36°	0.4	7.3	21	30	18.2	4	6	7.22	46	19.2	3	8	1.24	3	20.2	2	0	11.5	25	17.21.2	2	2	9.26	31	22.2	14.1	6.4	3.27	44	23.2	15.0		
37°	3	4.22	9	7	6	5	8.23	26	7	5	7	2.24	43	7	4	3.9	6.25	58	7	4	1.13.0	27	12	6	3	3	4.28	25	6	2			
38°	2	4.22	50	19.2	8	1.4	9.24	8	20.2	7	6	3.25	25	21.2	7	8	8.26	40	22.2	6	0	2.27	55	23.1	5	2	14.6	29	8.24.1	4			
39°	0	5.23	34	6.11.0	2	9.0	24	52	6.12.0	2.5	10.4	26	9	6	9	7	9.27	23	6	8	4.9	3.28	39	6	7	1	8.29	53	6	6			
40°	29.9	7.6	24	19	20.1	3	1	1.25	38	21.1	2	3	6.26	55	22.1	13.1	5	12.0	28	11.23.1	14.0	8	5.29	26	24.1	15.0	0	9	0.40	25.0	9		
41°	7	7.25	7	7	5	0	2.26	26	7	4	2	7.27	43	6	4	3.4	2.29	0	6	3	6	7	0.15	6	2	5.9	15.1	1.29	5.16	1			
42°	6	8.25	57	21.2	8	0.8	4.27	17	22.2	7	0	9.28	34	23.2	6	3	3.29	50	24.1	5	5	8	1	6.25	1	4	7	3.22	26	1	3		
43°	4	9.26	50	7.12.0	7	9.5	28	9	7.13.0	1.9	11.0	29	27	7	9	1	5.0	44	7	7	4.3	14	0	1.59	7	7	6	5	3.13	6	6		
44°	29.3	8.1	27	46	22.3	3	5	6.29	5	23.3	2	7	2	0.23	24.3	14.1	0	7	1.40	25.3	15.0	2	2	2.25	26.2	9	4	7	4	9.27	2	8	
45°	2	2.28	44	9	6	4	8	0	4	9	5	6	4	1.22	9	4	2.8	9	2.39	9	3	1	4	3.54	8.16.2	5.34	6.0	5.8	8	17.1			
46°	0	3.29	47	23.5	9	2	9	1	6.24.5	8	5	5	5	2.25	25.5	7	7	13.1	3.41	26.5	6	0	7	4.57	27.4	5	2	2	6.11	28.4	4		
47°	28.8	4	0.53	24.2	13.2	0	10.1	2	12.25.2	14.1	3	7	3.30	26.2	15.0	6	3	4.47	27.1	9	3.8	9	6	2.28	1	8	1	4	7.16	29.0	7		
48°	6	8.6	2	2	9	5	29.8	3	3.22	9	4	1	9	4.40	8	3	5	5	5.57	8.16.2	6.15.2	7.12	7	17.1	4.9	7	8.25	28	7.18.0				
49°	4	7	3.17	25.6	8	7	4	4.36	26.6	7	0.9	12.1	5.51	27.5	6	3	7	7	10.28.5	5	4	4	8.25	29.4	4	8	9	9.39	0.4	3			
50°	2	8	4.36	26.3	14.1	5	5	5	5.55	27.3	15.0	7	2	7.13	28.3	9	0	9	8.29	29.2	8	3	6	9.43	0.2	7	6.17.2	10.36	11	6			
51°	27.9	9.0	6	0.27.1	5	2	7	7.19	28.1	3	5	4	8.36	29.0	16.2	1.8	14.2	9.52	26	17.2	1	9.11	6	9.18.1	4	5.12	18	8.19.0					
52°	7	2	7.30	9	8	0	9	8.49	9	7	3	7.10	5	8	6	6	5.11	20	0.8	5	2.9	16.2	12.33	1.7	4	2	9.13	43	2.6	3			
53°	5	4	9	7.28.8	15.2	28.8	11.2	10.24	29.8	16.1	1	13.0	11.40	0.7	17.0	3	8.12	54	1.6	9	7	6.14	7	2.6	8	3.9	18.3	18.17	3.5	6			
54°	2	6.10	50	29.8	6	5	5.12	6	0.7	5	29.8	3	13.21	1.6	4	1.15.2	14.31	2.5	18.3	4	17.0	15.46	3.5	19.2	7	8.16	36	4.4	20.0				
55°	26.9	9.12	40	0.8	16.0	2	8	13.56	1.7	9	5	7.15	9	2.6	8	0.8	6.16	21	3.6	7	2	5.17	31	4.5	6	5	19.3	18.40	5.3	4			
56°	6	10.2	14	38	1.8	5	27.9	12.1	15.53	2.8	17.4	2	14.1	17	5	3.7	18.3	6	16.1	18.15	4.7	19.2	1.9	18.0	19.21	5.6	20.0	3	9.20	31	6.4	9	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.						H. M. S.						H. M. S.						H. M. S.						H. M. S.													
SID. T. 20 41 41} $\approx$						20 45 44} $\approx$ 9°						20 49 48} $\approx$ 10°						20 53 50} $\approx$ 11°						20 57 52} $\approx$ 12°													
ARC 310° 25'.2} 8°						311° 26'.1}						312° 26'.9}						313° 27'.5}						314° 27'.9}													
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3								
Lat.	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26	X	Y	8	II	26							
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°								
22	7.5	12.8	20	20	18.0	12.6	8.7	14.0	21	28	19.0	13.5	9.8	15.3	22	36	20.0	14.5	11.0	16.5	23	43	20.9	15.4	12.1	17.7	24	49	21.9	16.3	13.3	19.0	25	54	22.8	17.2	
23	5	9.2	20	45	4	7	6	1	21	54	3	7	8	4	23	2	3	6	10.9	6	24	9	21.2	5	1	9	25	15	22.2	4	2	1	26	21	23.1	4	
24	4	13.0	21	12	7	9	6	2	22	21	6	8	7	5	23	29	6	8	9	7	24	36	5	7	0	18.0	25	43	5	6	2	2	26	49	4	5	
25	3	1	21	39	19.0	13.1	5	3	22	48	20.0	14.0	7	6	23	57	9	9	8	9	25	4	9	8	11.9	1	26	11	8	7	1	3	27	18	8	7	
26	3	2	22	7	3	2	8.4	4	23	17	3	1	6	15.7	24	25	21.3	15.1	7	17.0	25	33	22.2	16.0	9	2	26	40	23.2	9	1	19.5	27	47	24.1	8	
27	7.2	3	22	36	7	4	4	14.5	23	46	6	3	9.5	8	24	55	6	2	7	1	26	3	6	1	8	4	27	10	5	17.1	0	6	28	17	4	18.0	
28	1	4	23	6	20.0	5	3	6	24	16	21.0	5	4	9	25	25	22.0	4	10.6	2	26	33	9	3	8	18.5	27	41	9	2	12.9	8	28	48	8	1	
29	0	13.5	23	37	4	7	2	7	24	47	3	6	4	16.1	25	56	3	6	5	3	27	5	23.3	5	7	6	28	13	24.2	4	9	9	29	20	25.1	3	
30	0	6	24	9	8	9	8.1	9	25	19	7	8	3	2	26	29	7	7	5	17.5	27	37	6	6	11.6	8	28	46	6	6	8	20.0	29	53	5	5	
31	6.9	7	24	41	21.1	14.1	1	15.0	25	52	22.1	15.0	9.2	3	27	2	23.0	9	4	6	28	11	24.0	8	6	9	29	19	9	7	8	2	0	27	9	6	
32	8	8	25	15	5	2	0	1	26	26	5	2	1	4	27	37	4	16.1	3	8	28	46	4	17.0	5	19.1	29	54	25.3	9	7	4	1	2	26.2	8	
33	7	9	25	51	9	4	7.9	2	27	2	9	3	1	16.6	28	12	8	3	10.3	9	29	21	8	2	4	2	0	30	7	18.1	12.6	6	138	6	19.0		
34	6	14.0	26	27	22.3	6	8	4	27	39	23.3	5	0	7	28	49	24.2	4	2	18.1	29	59	25.2	4	4	4	4	1	8	26.1	3	5	7	2	16	27.0	2
35	5	2	26	5	7	8	7	15.5	28	17	7	7	8.9	9	29	27	6	6	1	2	0	37	6	6	11.3	6	146	5	5	5	9	255	4	4			
36	6.4	3	27	44	23.2	15.0	6	7	28	56	24.1	9	8	17.1	0	7	25.1	8	0	4	1	18	26.0	8	3	8	226	9	7	4	21.1	3	35	9	6		
37	3	4	28	25	6	2	5	8	29	37	6	16.1	7	2	0	49	5	17.0	9.9	6	1	59	4	18.0	2	20.0	3	8	27.4	9	3	3	4	16	28.3	8	
38	2	14.6	29	8	24.1	4	7.4	16.0	0	20	25.0	3	6	4	1	32	26.0	2	8	8	243	9	2	1	2	352	8	19.1	12.2	6	5	0	8	20.0			
39	1	8	29	53	6	6	3	2	1	5	5	5	5	6	2	17	4	5	7	19.0	3	28	27.4	4	0	4	4	37	28.3	3	2	8	545	29.2	2		
40	0	9	0	40	25.0	9	2	4	1	52	26.0	8	8.4	8	3	4	9	7	6	2	4	14	9	6	10.9	6	524	8	5	1	22.0	6	32	7	4		
41	5.9	15.1	1	29	5	16.1	1	6	2	41	5	17.0	3	18.0	3	53	27.4	9	5	5	5	3	28.4	8	8	9	6	13	29.3	7	0	3	721	0.2	6		
42	7	3	220	26.1	3	0	8	3	32	27.0	2	2	2	4	44	28.0	18.1	9.4	7	5	54	9	19.0	7	21.1	7	4	8	9	11.9	5	813	7	8			
43	6	5	3	13	6	6	6.8	17.0	4	26	6	5	1	4	538	5	4	3	9	6	48	29.4	3	6	3	758	0.3	20.2	8	8	9	6	1.3	21.1			
44	4	7	4	9	27.2	8	7	2	5	22	28.2	7	7.9	7	6	34	29.1	6	2	20.1	7	44	26	5	5	6	854	9	4	7	23.1	10	2	8	3		
45	5.3	16.0	5	8	8	17.1	5	5	6	21	7	18.0	8	9	7	33	7	9	0	4	843	0.6	8	10.4	9	952	1.5	7	6	3	11	0	2.4	6			
46	2	2	6	11	28.4	4	4	7	7	24	29.3	3	6	19.2	8	35	0.3	19.1	8.9	7	945	1.2	20.1	3	22.2	10	54	2.1	21.0	5	612	2	3.0	9			
47	1	4	7	16	29.0	7	6.3	18.0	8	29	26	6	5	5	940	9	4	8	21.0	10	50	8	3	1	511	59	7	2	11.4	9	13	6	622.1				
48	4.9	7	8	25	7	18.0	2	3	9	38	0.6	9	7.4	8	10	49	1.5	7	7	3	11	59	2.4	6	0	913	7	3.3	5	324.3	14	14	4.2	4			
49	8	9	9	39	0.4	3	0	6	10	51	1.3	19.2	3	20.1	12	1	2.2	20.0	5	7	13	10	3.1	9	9.8	23.3	14	18	4.0	8	1	715	25	9	7		
50	6	17.2	10	56	1.1	6	5.8	9	12	8	2.0	5	1	5	13	18	9	3	8.4	22.1	14	26	8	21.2	7	7	15	34	7.22.1	0.25.2	16	40	5.6	23.0			
51	4	5	12	18	8	19.0	6	19.3	13	29	7	8	6.9	9	14	35	3.6	6	2	5	15	46	4.5	5	5	24.1	16	53	5.4	4	10.8	7	17	58	6.3	4	
52	2	9	13	45	2.6	3	4	7	14	55	3.5	20.1	7	21.3	16	4	4.4	21.0	0	23.0	17	11	5.3	9	3	6	18	17	6.2	7	626.2	19	21	7.1	7		
53	3.9	18.3	15	17	3.5	6	2	20.1	16	27	4.4	5	6	8	17	34	5.3	4	7.9	5	18	41	6.1	22.2	1	25.1	19	45	7.0	23.1	5	8	20	49	9.24.0		
54	7	8	16	56	4.4	20.0	0	6	18	4	5.3	9	4	4	22.3	19	10	6.2	8	7	24.1	20	16	7.0	6	0	7	21	19	9	5	327.4	22	22	8.7	3	
55	5	19.3	18	40	5.3	4	4.8	21.1	19	47	6.2	21.3	2	9	20	52	7.1	22.2	5	7	21	56	9.23.0	8.9	26.4	22	59	8.8	9	228.1	24	0	9.6	7			
56	3	9	20	31	6.4	9	6	7	21	36	7.2	8	0	23.6	22	40	8.1	6	3	25.4	23	43	8.9	4	7	27.2	24	44	9.8	24.4	0	925	43	10.6	25.1	1	

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.												H. M. S.												H. M. S.												H. M. S.											
SID. T. 21 5 53						21 9 52						21 13 51						21 17 49						21 21 46						21 25 43																	
ARC 316° 28'.2						317° 28'.0						318° 27'.7						319° 27'.2						320° 26'.6						321° 25'.7																	
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3						
Lat.	X	Y	8	II	26	Lat.	X	Y	8	II	26	Lat.	X	Y	8	II	26	Lat.	X	Y	II	26	Lat.	Lat.	X	Y	II	26	Lat.	Lat.	X	Y	II	26	Lat.	Lat.	X	Y	II	26	Lat.	Lat.					
22°	14.4	20.2	26.59	23.7	18.1	15.5	21.4	28	4	24.7	19.0	16.7	22.6	29	8	25.6	19.9	17.8	23.7	0	11	26.5	20.9	19.0	24.9	1	14	27.4	21.8	20.1	26.1	1	216	28.3	22.7	22.7	22.7										
23°	3	3	27	27	24.0	3	5	5	28	31	25.0	2	6	7	29	35	9	20.1	8	9	0	39	8	21.0	18	9	25.1	1	42	7	9	1	3	244	6	8											
24°	3	4	27	55	4	4	4	6	28	59	3	3	6	9	0	4	26.2	2	7	24.1	1	7	27.1	1	9	2	210	28.1	22.0	0	4	313	29.0	23.0													
25°	2	6	28	23	7	6	4	8	29	28	6	5	6	23.0	0	33	6	4	7	2	136	5	3	9	4	240	4	2	0	6	342	3	1														
26°	2	7	28	53	25.0	7	15.3	9	29	58	26.0	6	5	2	1	3	9	5	7	4	2	6	8	4	8	6	310	7	3	0	8	412	6	3													
27°	14.1	9	29	23	4	9	3	22.1	0	28	3	8	16.5	3	133	27.2	7	17.6	5	2	37	28.1	21.6	8	5	341	29.1	5	199	270	443	26	4														
28°	1	21.0	29.54	7	19.0	2	3	1	0	7	20.0	4	5	2	5	6	9	6	7	3	9	5	8	15.7	26.0	4	12	4	7	9	2	515	0	323.6													
29°	0	2	0	26	26.1	2	2	4	1	32	27.0	1	4	7	237	9	21.0	5	9	342	8	9	7	2	445	7	8	9	4	548	6	7															
30°	0	3	1	0	4	4	15.1	6	2	5	4	3	3	9	3	11	28.3	2	5	25.1	4	15	29.2	22.1	6	4	519	01	23.0	8	6	622	1.0	9													
31°	13.9	5	1	34	8	5	1	8	240	7	5	3	24.1	3	45	6	4	4	3	450	5	3	6	6	554	5	2	8	8	657	4	24.1															
32°	9	7	2	9	27.2	7	0	23.0	3	15	28.1	6	16.2	3	421	29.0	5	17.4	5	5	25	9	4	6	8	629	8	3	19.7	28.0	7	33	7	2													
33°	8	9	2	45	6	9	0	2	351	5	8	2	5	457	4	7	3	7	6	2	0.3	6	18.5	27.0	7	6	12	5	7	3	8	9	2.1	4													
34°	7	22.1	3	23	28.0	20.1	14.9	4	429	9	21.0	1	7	5	35	8	9	3	26.0	6	40	7	8	5	2	744	6	7	7	5	847	5	6														
35°	7	3	4	2	4	3	9	6	5	8	29.3	2	0	9	6	14	0.2	22.1	2	2	7	19	1.1	23.0	4	5	823	2.0	9	6	8	926	9	8													
36°	13.6	5	4	42	8	5	8	8	549	7	4	0	25.1	6	55	6	3	2	4	7	59	5	2	4	7	9	4	424.1	19.6	29.0	10	7	3.3	9													
37°	5	7	5	24	29.2	7	7	24.0	6	31	0.2	6	15.9	4	7	37	1.0	5	17.1	7	8	41	9	4	18.4	28.0	9	45	8	3	5	3	1049	7	25.1												
38°	4	9	6	8	7	9	7	3	7	14	6	8	9	6	8	20	5	7	127.0	9	25	2.4	6	3	2	1029	3.3	5	5	6	1132	4.2	3														
39°	4	23.2	6	53	0.2	21.1	14.6	5	8	0	1.1	22.0	8	9	9	5	9	9	0	2	10	10	8	8	3	5	1114	7	7	4	8	1217	6	5													
40°	13.3	4	7	40	6	3	5	8	847	6	2	7	26.1	9	52	2.4	23.1	0	5	1057	3.3	24.0	2	8	12	1	4.2	9	19.4	0	113	4	5.1	7													
41°	2	7	8	29	1.1	5	4	25.1	9	36	2.1	4	6	4	10	41	9	3	16.9	8	1146	8	2	18.2	29.1	12	50	7	25.1	3	4	1353	6	26.0													
42°	1	24.0	9	20	6	7	4	4	1026	6	6	15.6	7	11	32	3.5	5	8	28.1	12	37	4.4	4	1	4	1340	5	2	3	3	71443	6.1	2														
43°	0	3	10	13	2.2	22.0	14.3	7	11	20	3.1	9	5	27.0	12	25	4.0	7	7	4	1330	9	6	1	7	1433	8	5	2	11	1536	6	4														
44°	12.9	6	11	9	7	2	2	26.0	12	15	6	23.1	5	3	13	21	5	24.0	6	7	1425	5	4	9	0	8	1528	6.3	8	19.2	5	1631	7.2	6													
45°	9	8	12	7	3.3	5	1	3	13	13	4.2	4	4	6	14	18	5.1	2	16.6	29.0	1522	6.0	25.1	17.9	0	4	1625	9.260	1	1	9	1728	7	9													
46°	8	25.1	13	9	9	8	0	6	14	14	8	6	15.3	28.0	15	19	7	4	5	4	1623	6	3	8	8	1725	7.4	2	1	2.3	1827	8.3	27.1														
47°	7	5	14	13	4.5	23.0	13.9	27.0	15	18	5.4	8	2	4	1622	6.3	7	5	8	1726	7.2	6	7	1.2	1828	8.0	4	0	7	1929	9	3															
48°	5	9	15	20	5.1	2	8	4	1625	6.0	24.1	1	8	1728	9	25.0	4	0.3	1831	8	8	6	7	1933	6	7	18.9	3	2234	9.5	6																
49°	12.4	26.3	16	30	8	5	7	8	1735	7	4	0	29.3	18	38	7.5	3	16.3	8	1940	8.4	26.1	5	2	22041	9.3	27.0	8	7	2142	10.1	9															
50°	3	8	17	44	6.5	8	6	2	28.3	18	48	7.4	7	14.9	8	1951	8.2	6	2	1.3	2053	9.1	4	17.5	8	2153	10.0	3	7	4	32253	8.282															
51°	2	27.3	19	3	7.2	24.2	13.5	8	20	6	8.1	25.0	7	0	4.21	8	9	9	0	922	9	8	8	4	3.423	9	6	6	9	24	8.115	5															
52°	0	8	20	25	8.0	5	3	29.4	21	27	8	4	6	10	2228	9.6	26.2	15.9	2	5	2329	10.5	271	3	4	0	2328	11.3	9	18.5	5	52526	12.2	8													
53°	11.9	28.4	21	52	8	8	2	8	22	53	9.6	7	5	6	23.53	10.4	6	8	3	22453	11.3	4	2	7	2551	12.1	28.2	5	6	22648	13.0	29.2															
54°	7	29.1	23	23	9.6	25.2	0	0	7	24	24	10.5	26.0	14.4	2	3.25	23	11.2	9	7	4.0	2621	12.1	7	1	5.5	2718	13.0	6	4	7	2818	14	5													
55°	6	8	25	0	10.5	6	12.9	1.5	25	59	11.3	4	3	3.1	2657	12.1	27.3	6	8	2751	13.0	28.1	16.9	6	42850	8.290	0	3	9	2945	14.6	8															
56°	4	8	26	42	11.4	26.0	7	2	4	2740	12.2	9	1	4.1	2836	13.0	7	5	5.8	2932	9	5	7	7	0	26147	4	1	4	8	120155	0.2															

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.						H. M. S.						H. M. S.						H. M. S.						H. M. S.												
SID. T. 21 25 43 } ≈						21 29 39 } ≈ 20°						21 33 34 } ≈ 21°						21 37 29 } ≈ 22°						21 41 23 } ≈ 23°												
ARC 321° 25'.7 } 19°						322° 24'.7 } 323° 23'.5 }						324° 22'.2 }						325° 20'.6 }						326° 19'.0 }												
II.	11	12	1	2	3	II.	11	12	1	2	3	II.	11	12	1	2	3	II.	11	12	1	2	3	II.	11	12	1	2	3							
Lat.	X	Y	II	II	II	X	Y	II	II	II	II	X	Y	II	II	II	X	Y	II	II	II	X	Y	II	II	II	X	Y	II	II	II					
22°	20.1	26.1	2	16	28.3	22.7	21.2	27.2	3	17	29.2	23.6	22.4	28.4	4	18	0.1	24.5	23.5	29.5	5	19	1.0	25.4	24.6	0.7	6	19	1.9	26.3	25.7	1.8	7	18	2.8	27.2
23	1	3	241	6	8	2	4	346	5	7	3	6	447	4	6	5	7	547	3	5	6	8	647	2.2	4	7	2.0	747	3.1	3						
24	0	4	313	29.0	23.0	2	6	415	9	9	3	8	516	8	8	4	9	617	7	7	6	1.0	717	5	6	7	2	816	4	5						
25	0	6	342	3	1	1	8	444	0.2	24.0	3	29.0	546	1.1	9	4	0.1	646	2.0	8	6	2	747	9	7	7	4	846	7	6						
26	0	8	412	6	3	1	28.0	514	5	2	3	2	616	4	25.1	4	3	717	3	26.0	5	4	817	3.2	9	7	6	917	4.1	8						
27	19.9	27.0	443	26	4	21.1	2	545	9	3	22.2	4	647	7	2	23.4	5	748	6	1	24.5	7	849	5	27.0	25.7	8	949	4	9						
28	9	2	515	0.3	23.6	0	4	617	1.2	5	2	6	719	2.1	4	3	7	821	3.0	3	5	9	921	9	2	7	3.1	1021	7	28.1						
29	9	4	548	6	7	0	6	650	5	6	2	8	752	4	5	3	1.0	853	3	4	5	2.1	954	4.2	3	6	31054	5.1	2							
30	8	6	622	1.0	9	0	8	724	9	8	1	8	826	8	7	3	2	927	7	26.6	5	4	1028	6	5	6	61128	4	4							
31	8	8	657	424.1	20.9	29.0	759	2.3	25.0	1	0.2	91	3.1	9	3	410	2	4.0	7	4	611	3	9	6	6	8123	8	5								
32	19.7	28.0	733	7	2	9	3	835	6	1	22.1	5	937	5	26.0	23.2	7	1038	4	9	24.4	91138	5.3	8	25.6	4.1	1238	6.2	7							
33	7	3	89	2.1	4	9	5	912	3.0	3	0	7	1014	9	2	2	2.0	1115	8	27.1	4	3.2	1215	7	28.0	6	41315	5	9							
34	7	5	847	5	6	8	8	950	4	5	0	1.0	1052	4.3	4	2	21153	5.2	2	4	51253	6.1	1	5	71353	929.0										
35	6	8	926	9	8	8	8	1029	8	6	0	31131	7	5	2	51232	6	4	3	71333	5	3	5	5.0	1432	7.3	2									
36	19.6	29.0	10	7	3.3	9	20.8	0.3	1110	4.2	8	21.9	61211	5.1	7	1	81313	6.0	6	3	401414	9	4	5	31513	7	4									
37	5	31049	725.1	7	51151	6	26.0	9	81253	5	9	23.1	3.0	1355	4	8	24.3	31455	7.3	6	25.5	61554	8.2	6												
38	5	61132	4.2	3	7	81235	5.1	2	9	211337	6.0	27.1	1	31438	8	28.0	3	61538	7	8	5	91638	6	7												
39	4	81217	6	5	6	1.1	1320	5	4	8	41422	4	3	0	71523	7.3	2	2	91623	8.2	29.0	4	631722	9.0	9											
40	19.4	0.1	134	5.1	7	20.6	414	7	6.0	6	8	7158	9	5	0	40169	7	4	2	53179	6	2	4	6188	5	0.1										
41	3	41353	626.0	5	71455	5	8	21.7	3.0	1556	7.4	7	0	41657	8.2	6	24.2	71757	9.1	4	4	701856	9	3												
42	3	71443	6.1	2	5211545	7.0	27.1	7	41647	9	9	22.9	81746	7	8	1	611846	6	6	25.4	41945	10.4	5													
43	2	1.1	1536	6	4	51638	5	3	6	81738	8.4	28.2	9	5.2	1838	9.2	29.0	1	51937	10.1	8	4	82036	9	7											
44	19.2	51631	7.2	6	20.4	91732	8.1	5	6	4.2	1832	9	4	8	61932	8	3	1	92031	6	8	3	822129	11.5	1.0											
45	1	91728	7	9	3	3.3	1829	6	8	5	61929	9.5	6	8	6.0	2028	10.3	5	24.1	7.3	2127	11.2	0.2	3	62225	12.0	2									
46	1	2.3	1827	8.3	27.1	3	71928	9.2	28.0	21.5	5.0	2028	10.0	8	7	52127	9	7	0	82225	7	5	3	9.1	2322	6	4									
47	0	71929	9	3	2	4.2	2029	8	2	5	52129	6	29.0	22.7	7.0	2228	11.5	8	0	8.3	2325	12.3	7	25.3	62422	13.1	6									
48	18.9	3.2	2034	9.5	6	20.2	72134	10.4	4	4	6.0	2233	11.2	3	7	52331	12.1	0.2	0	82428	9	1.0	3	10.2	2524	7	9									
49	8	72142	10.1	9	1	5.2	2241	11.0	7	4	62340	8	6	6	8.0	2437	7	4	23.9	9.4	2534	13.5	3	2	82630	14.3	2.1									
50	7	4.3	2253	828.2	0	82352	629.0	3	7.2	2449	12.5	9	6	62546	13.3	7	9	10.0	2642	14.1	6	2	11.4	2738	9	4										
51	6	9.24	811.5	5	0	6.425	512.3	3	21.3	826	213.1	0.2	6	9.22659	14.0	1.0	9	62754	8	9	25.2	12.1	2849	15.6	7											
52	18.5	5.52526	12.2	8	19.9	7.12623	13.0	7	2	8.52719	8	5	22.5	92814	7	4	811.329	915.5	2.2	1	803	16.3	3.1													
53	5	6.22648	13.0	29.2	8	82744	8	8	1	9.32839	14.6	8	4	10.72934	15.4	7	23.812.1	027	16.2	4	113.6	120	17.0	4												
54	4	7.02814	8	5	7	8.629	914.6	0.3	0	10.10	0315.4	1.1	3	11.6057	16.2	2.0	713.0	149	17.0	7	014.5	241	7	7												
55	3	92945	14.6	8	6	9.5039	15.4	7	20.911.0	13216.2	5	3	12.5224	17.0	3	614.0315	7	3.1	24.915.5	4	618.5	4.0														
56	1	8.9120	15.5	0.2	5	10.5212	16.2	1.1	912.0	3417.0	9	2	13.5355	8	7	515.1445	18.5	5	916.6535	19.3	4															

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.						H. M. S.						H. M. S.						H. M. S.						H. M. S.																									
SID. T. 21 49 8			21 53 0			21 56 52			22 0 42			22 4 33			22 8 22			H. M. S.			H. M. S.			H. M. S.																									
ARC 327° 17'.1						328° 15'.1						329° 12'.9						330° 10'.6						331° 8'.1																									
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3																				
Lat.	X	8	H	26	26	X	8	H	26	26	X	8	H	26	26	X	8	H	26	26	X	8	H	26	26	X	8	H	26	26																			
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°																					
22	26.9	2.9	8 17	3.7	28.1	28.0	4.1	9 16	4.6	29.0	29.1	5.1	10 14	5.1	29.9	0.2	6.2	11 12	6.3	0.8	1.3	7.3	12 9	7 2	1.7	2.4	8 13	6 8	0.26																				
23	8	3.1	8 46	4.0	2	0	3	9 45	9	1	1	3 10	43	7	8	2	5 11	41	6	9	3	6 12	35	5	8	4	7 13	35	3	7																			
24	8	3	9 15	3	4	0	5	10 14	5.2	3	1	6 11	12	6.0	0.2	2	7 12	10	9	1.0	3	8 13	8	8	9	4	9 14	4	6	8																			
25	8	5	9 46	6	5	0	7	10 44	5	4	1	8 11	43	4	3	2	9 12	40	7.2	2	3	8 0	13 35	8.1	2.1	4	9 14	35	9.0	3.0																			
26	8	8	10 17	5.0	28.6	0	9 11	15	8 29.5	1	6 0	12	13	7	4	2	7.1	13 11	6	3	3	3 14	9	4	2	4	4 15	6	3	1																			
27	26.8	4.0	10 48	3	8	27.9	5.1	11 47	6.2	7	29.1	3 12	45	7.0	6	0.2	4 13	43	9	5	1.3	5 14	40	7	4	2.5	6 15	37	6	3																			
28	8	2	11 20	6	9	9	4	12 19	5	8	1	5 13	17	4	7	2	7 14	18	8.2	1.6	3	8 15	13	9.1	5	5	9 16	9	9	4																			
29	8	5 11	53	6.0	29.1	9	6 12	52	8	8	1	8 13	51	7	9	2	9 14	48	6	8	3	9 0	15 46	4	7	5	10 2	16 43	10.3	3.5																			
30	8	7 12	27	3	3	9	9 13	26	7.2	0.1	1	7 0	14	25	8.1	1.0	2	8.2	15 22	9	9	3	3 16	20	8	8	5	4 17	16	6	7																		
31	8	5.0	13	2	7	4	9	6 2	14	1	5	3	1	3 14	59	4	2	2	5 15	57	9.3	2.1	4	6 16	54	10 1	3.0	5	7 17	51	11 0	8																	
32	26.7	3 13	38	7.0	6	27.9	4 14	37	9	5	29.1	6 15	35	8	3	0.2	8 16	33	6	2	1.4	9 17	30	5	1	2.5	11 1	15 27	3	4.0																			
33	7	6 14	15	4	7	9	7 15	14	8.3	6	1	9 16	12	9.2	5	2	9.1	17 10	10.0	4	4	10 2	18	7	9	3	5	4 19	3	7	1																		
34	7	9 14	53	8	9	9	7 0	15	51	7	8	1	8 2	16 50	5	1.7	2	4 17	47	4	5	4	5 18	44	11.2	4	5	7 19	41	12.1	3																		
35	7	6 2	15	32	8.2	0.1	9	3 16	30	9.1	1.0	0	5 17	28	9	8	2	7 18	26	8	7	4	9 19	23	6	3.6	5	12 0	20 19	5	5																		
36	7	5 16	12	6	2	9	7 17	10	5	1	0	8 18	8 10.3	9	2	2 10.0	19	6 11.2	9	4	4 11.2	20	3 12.0	0	8	5	4 20	59	9	4.6																			
37	26.7	8 16	54	9.0	4	27.8	8 0	17	52	9	3	29.0	9.2	18 50	7	2.1	0.2	4 19	47	6	3.1	1.4	6 20	44	4	9	2.6	8 21	40	13.3	7																		
38	6	7.1	17	37	4	6	8	3 18	35	10.3	5	0	6 19	32	11.2	3	2	8 20	29	12.0	2	4	9 21	26	8	4.1	6 13.1	22 22	7	9																			
39	6	4 18	21	9	8	8	6 19	19	7	7	0	9 20	16	6	5	2	11.1	21	13	4	4	4 12.3	22	10 13.3	3	6	5 23	6 14.1	5.1	5.1																			
40	6	8 19	7 10.3	1.0	8	9 0	20	5 11.2	9	0	10.3	21	2 12.0	7	2	2	5 21	59	9	6	4	7 22	55	7	5	6	9 23	50	5	3																			
41	6	8.2	19	54	8	2	8	4 20	52	6	2.1	0	7 21	49	5	9	2	9 22	45	13.3	8	4	13.1	23	41 14.2	7	7	6 14.3	24	37	15.0	8																	
42	26.6	6 20	43	11.3	4	27.8	8 21	41	12.1	3	29.0	11.1	22 38	13.0	3.1	0.2	12.3	23 31	8	4.0	1.4	6 24	29	6	9	2.6	8 25	24	4	7																			
43	6	9.0	21	34	8	6	8	10.2	22	31	6	5	0	5 23	28	5	3	2	8 24	24	14.3	2	4	14.1	25	19 15.1	5.1	5	6 15.3	26	14	9	9																
44	5	4 22	27	12.3	8	8	7 23	24	13.1	7	0	12.0	24	20 14.0	5	2	13.3	25	16	8	4	4	6 26	11	6	3	6	8 27	5 16.3	6.1	6																		
45	5	9 23	22	8	2.0	8	11.2	24	18	7	9	0	5 25	14	5	7	2	8 26	10	15.3	7	5	15.1	27	4 16.1	5	5	7 16.3	27	58	7	3																	
46	5	10.4	24	19	13.4	2	7	7 25	15	14.2	3.1	0	13.0	26	10 15.0	9	2	14.3	27	5	8	9	5	6 28	0	6	7	7	8 28	53	17.4	5																	
47	26.5	9 25	19	9	5	27.7	12.2	26	14	8	3	29.0	6 27	9	6	4.2	0.2	9 28	4 16.4	5.1	1.5	16.2	28	57	17.2	9	2	7 17	4 29	0	18	7																	
48	4 11.5	26	21	14.5	7	7	8 27	15	15.3	6	0	14.2	28	10 16.1	4	2	15.5	29	4	9	3	5	8 29	57	7	6.1	7 18	0	0.0	7.0																			
49	4 12.1	27	25	15.1	3.0	7	7 13.4	28	19	9	9	0	8 29	13	7	7	2	16.1	0	7 17.5	5	5	14.7	4	0.3	18 3	3	3	7	6	1 18 1	1	2																
50	4	8 28	32	7	3	7 14.1	29	26	16.5	4.1	0	15.5	0 19	17 3	5.0	2	8 14.2	18 1	8	5 18.1	2	4	9	6	8 19.5	2 85	7	5	5	9 22.7	7 38	22.4	6																
51	4 13.5	29	42	16.4	6	7	8 0	36	17.1	4	28	9 16.2	1 28	9	3	2	17.5	2 20	7	6.1	3	8	8 31	14.9	5	9	8 20.0	4 120	1	8																			
52	26.4	14.2	0 56	17.1	9	27.7	15.6	1 48	8	7	9 17.0	2 40	18 6	6	0	2 18.3	3 31	19 4	4	1 5 19.6	4 21	20 1	7.1	2.5	8 5 11	21 0	8.1	1																					
53	3 15.0	2 12	8	4.2	6	16.4	3	4 18.5	5.0	9	8	3 5 1	19 3	8	8	2 19.2	4 44	20.1	7	5 20.5	5 34	8	8	8 1 7	6 23	7	4																						
54	3	9	3 32	18.5	5	6 17.3	4 23	19.3	3	9 18.7	5 12	20	6	1	2 20.1	6	2	8	7.0	6 21.5	6 30	21 5	8	9 22.7	7 38	22.4	6																						
55	3 16.9	4 56	19.3	8	6 18.3	5 45	20 1	6	9 19.7	6 33	8	4	2 21.1	7 22	21 6	5	6 22.5	8 10	22.3	8.1	9 23.8	8 57	23 1	9	5	3 18.0	6 24	20 1	5.2	6 19.4	7 12	9 6 0	9 20.8	7 59	21 6	8	2 22.2	8 46	22 3	7	6 23.6	9 33	23 1	8	9 23.8	8 57	23 1	9	5
56	3 18.0	6 24	20.1	5.2	6 19.4	7 12	9 6 0	9 20.8	7 59	21 6	8	2 22.2	8 46	22 3	7	6 23.6	9 33	23 1	8	9 23.8	8 57	23 1	9	5	9 23.8	8 57	23 1	9	5	9 23.8	8 57	23 1	9	5															

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S. SID. T. 22 8 22 ARC 332° 5'.5					H. M. S. 22 12 11 333° 2'.8					H. M. S. 22 16 0 333° 59'.9					H. M. S. 22 19 47 334° 56'.8					H. M. S. 22 23 35 335° 53'.7					H. M. S. 22 27 22 336° 50'.4														
0°					1°					2°					3°					4°					5°														
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3									
Lat.	♀	8	□	ꝝ	Ꝉ	♀	8	□	ꝝ	Ꝉ	♀	8	□	ꝝ	Ꝉ	♀	8	□	ꝝ	Ꝉ	♀	8	□	ꝝ	Ꝉ	♀	8	□	ꝝ	Ꝉ									
22°	2.4	8.4	13	6	8.0	2.6	3.5	9.5	14	2	8.9	3.5	4.6	10.6	14	58	9.7	4.4	5.7	11.6	15	54	10.6	5.3	6.8	12.7	16	49	11.5	6.1	7.9	13.7	17	44	12.3	7.0			
23	4	7	13	35	3	7	5	7	14	31	9.2	6	6	8	15	27	10.0	5	7	9	16	23	9	4	8	9	17	18	8	3	9	14.0	18	13	6	2			
24	4	9	14	4	6	8	5	10.0	15	1	5	7	6	11.1	15	57	4	6	8	12.1	16	53	11.2	5	9	13.2	17	48	12.1	4	9	2	18	42	9	3			
25	4	9.1	14	35	9.0	3.0	6	2	15	31	8	9	6	3	16	27	7	8	8	4	17	23	5	6	9	4	18	18	4	5	8.0	5	19	13	13.2	4			
26	4	4	15	6	3	1	6	5	16	2	10.1	4.0	7	6	16	58	11.0	9	5.8	6	17	54	8	8	6.9	7	18	49	7	6.7	0	8	19	43	5	7.6			
27	2.5	6	15	37	6	3	3.6	7	16	34	5	1	4.7	8	17	29	3	5.0	8	9	18	25	12.2	9	9	14.0	19	20	13.0	8	0	15.0	20	15	9	7			
28	5	9	16	9	9	4	6	11.0	17	6	8	3	7	12.1	18	2	6	2	8	13.2	18	57	5	6.1	9	3	19	52	3	9	1	3	20	47	14.2	8			
29	5	10.2	16	43	10.3	3.5	6	3	17	39	11.1	4	7	4	18	35	12.0	3	9	5	19	30	8	2	7.0	6	20	25	7	7.1	1	6	21	20	5	8.0			
30	5	4	17	16	6	7	6	6	18	13	5	4.6	7	7	19	9	3	5	5.9	8	20	4	13.2	3	0	9	20	59	14.0	2	8.1	9	21	53	8	1			
31	5	7	17	51	11.0	8	6	9	18	47	8	7	8	13.0	19	43	7	5.6	9	14.1	20	38	5	5	0	15.2	21	33	3	4	2	16.2	22	28	15.2	2			
32	2.5	11.1	18	27	3	4.0	3.6	12.2	19	23	12.2	9	4.8	3	20	19	13.0	7	9	4	21	14	9	6.6	1	5	22	9	7	5	2	6	23	3	5	4			
33	5	4	19	3	7	1	7	5	19	59	6	5.0	8	6	20	55	4	9	9	7	21	50	14.2	8	1	8	22	45	15.1	7.6	2	9	23	39	9	8.5			
34	5	7	19	41	12.1	3	7	8	20	37	9	2	8	9	21	32	8	6.0	6.0	15.0	22	27	6	9	7.1	16.1	23	22	4	8	3	17.2	24	16	16.2	7			
35	5	12.0	20	19	5	5	7	13.2	21	15	13.3	3	8	14.3	22	11	14.1	2	0	4	23	5	15.0	7.1	2	5	24	0	8	9	8.3	6	24	54	6	8			
36	5	4	20	59	9	4.6	3.7	5	21	55	7	5	4.9	7	22	50	5	4	0	8	23	44	4	2	2	9	24	39	16.2	8.1	3	18.0	25	33	17.0	9.0			
37	2.6	8	21	40	13.3	7	7	9	22	35	14.1	7	9	15.0	23	30	9	5	0	16.2	24	25	8	4	2	17.3	25	19	6	3	4	4	26	13	4	1			
38	6	13.1	22	22	7	9	7	14.3	23	17	5	8	9	4	24	12	15.3	7	0	6	25	6	16.2	6	3	7	26	0	17.0	4	4	4	8	26	54	8	3		
39	6	5	23	6	14.1	5.1	8	6	24	1	9	6.0	9	8	24	55	8	9	6.1	17.0	25	49	6	8	7.3	18.1	26	43	4	6	5	19.2	27	36	18.2	5			
40	6	9	23	50	5	3	3.8	15.0	24	45	15.4	2	5.0	16.2	25	40	16.2	7.1	1	4	26	33	17.0	9	3	5	27	27	8	8	8.5	6	28	20	6	9.6			
41	6	14.3	24	37	15.0	5	8	4	25	31	8	4	0	6	26	25	6	3	1	9	27	19	5	8.1	4	19.0	28	12	18.3	9.0	6	20.1	29	5	19.1	7			
42	2.6	8	25	24	4	7	8	9	26	19	16.3	6	0	17.1	27	12	17.1	5	1	18.4	28	6	9	3	4	5	28	59	7	2	6	6	29	51	5	9			
43	6	15.3	26	14	9	9	8	16.4	27	8	7	8	1	6	28	1	6	7	2	9	28	55	18.4	5	5	20.0	29	47	19.2	4	7	21.1	0	39	20.0	10.1			
44	6	8	27	5	16.4	6.1	3.9	9	27	59	17.2	7.0	5.1	18.1	28	52	18.1	9	6.2	19.4	29	45	9	7	7.5	5	0	37	7	6	7	6	1	28	5	3			
45	7	16.3	27	58	9	3	9	17.4	28	51	7	2	1	6	29	44	6	8.1	2	9	0	36	19.4	9	5	21.1	1	28	20.2	8	8.8	22.2	2	19	9	5			
46	7	8	28	53	17.4	5	9	18.0	29	46	18.2	4	2	19.2	0	38	19.1	3	3	20.5	1	30	9	9.2	6	7	2	21	7	10.0	8	8	3	12	21.4	7			
47	2.7	17.4	29	50	18.0	7	9	6	0	42	8	6	2	8	1	34	6	4	3	21.1	2	26	20.4	4	4	6	22.3	3	16	21.2	2	9	23.4	4	6	22.0	9		
48	7	18.0	0	49	5	7.0	4	0	19.2	1	41	19.3	8	5.2	20.4	2	32	20.1	6	6.4	7	3	23	9	8	6	6	9	4	13	7	4	4	9	24.1	5	3	5	11.1
49	7	6	1	51	19.1	2	0	9	2	42	9	8.1	3	21.1	3	33	7	8	4	22.4	4	23	21.4	8	7.7	23.6	5	12	22.2	6	9.0	8	6	2	23.1	3			
50	8	19.3	2	55	7	5	0	20.6	3	46	20.5	3	3	3	8	4	35	21.3	9.1	5	23.1	5	25	22.0	10.0	7	24.3	6	14	8	8	8	25.5	7	2	6	6		
51	8	20.0	4	1	20.4	8	1	21.3	4	51	21.1	6	6	4	22.6	5	40	9	4	5	9	6	29	6	3	8	25.1	7	18	23.4	11.1	1	26.3	8	5	24.2	8		
52	2.8	8	5	11	21.0	8.1	4.1	22.1	6	0	7	9	5.4	23.4	6	48	22.5	7	6.6	24.7	7	36	23.2	6	9	9	8	24	24.0	3	1	27.2	9	11	8	12.1			
53	8	21.7	6	23	7	4	1	23.0	7	11	22.4	9.1	5	24.3	7	59	23.2	9	7	25.6	8	46	9	8	9	26.8	9	33	6	5	9.2	28.1	10	19	25.4	4			
54	9	22.7	7	38	22.4	6	2	24.0	8	25	23.1	4	5	25.3	9	12	9	10.2	7	26.6	9	59	24.6	11.0	8	0	27.8	10	44	25.3	8	3	29.1	11	30	26.1	7		
55	9	23.8	8	57	23.1	9	2	25.1	9	43	8	7	5	26.4	10	29	24.6	5	8	27.7	11	14	25.3	3	1	28.9	11	59	26.0	12.1	4	0.2	12	43	8	13.0			
56	9	25.0	10	18	9	9.2	2	26.3	11	4	24.6	10.0	6	27.6	11	48	25.3	9	9	28.9	12	33	26.0	7	2	0.1	13	17	7	5	6	1.4	14	0	27.5	3			

TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.										
SID. T. 22 31 8					22 34 54					22 38 39					22 42 24					22 46 9										
ARC 337° 47'.0					338° 43'.4					339° 39'.8					340° 36'.0					341° 32'.2										
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	Ψ	8	II	26	Ω	Ψ	8	II	26	Ω	Ψ	8	II	26	Ω	Ψ	8	II	26	Ω	Ψ	8	II	26	Ω					
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°						
22	9.0	14.8	18.38	13.2	7.9	10.1	15.8	19.32	14.0	8.8	11.2	16.8	20.26	14.9	9.7	12.2	17.9	21.19	15.7	10.6	13.3	18.9	22.13	16.5	11.5					
23	0	15.0	19.7	5	8.1	1	16.1	20	1	3	9	2	17.1	20.55	15.2	8	3	18.1	21.48	16.0	7	4	19.2	22.42	8	6				
24	1	3	19.37	8	2	1	3	20.31	6	9.1	2	4	21.25	5	10.0	3	4	22.18	3	9	4	4	23.11	17.1	7	5				
25	1	6	20.7	14.1	3	2	6	21	1	9	2	3	7	21.55	8	1	3	7	22.48	6	11.0	4	7	23.41	4	9	5			
26	1	8	20.38	4	4	2	9	21.32	15.2	3	3	9	22.25	16.1	2	12.4	19.0	23.19	9	1	5	20.0	24.12	7	12.0	14.6				
27	9.1	16.1	21.9	7	8.6	10.2	17.2	22	3	5	5	11.3	18.2	22.57	4	3	4	3	23.50	17.2	2	13.5	3.24	43.18.0	1	6				
28	2	4	21.41	15.0	7	3	5	22.35	9	9.6	4	5	23.29	7	10.5	5	6	24.22	5	4	6	6	25.15	4	2	7				
29	2	7	22.14	4	8	3	8	23	8	16.2	7	4	8.24	1	17.0	6	5	9	24.54	8	11.5	6	9	25.47	7	4	7			
30	2	17.0	22.48	7	9.0	4	18.1	23.11	5	9	5	19.1	24.35	3	7	12.6	20.2	25.27	18.2	6	7	21.2	26.20	19.0	12.5	14.8				
31	3	3	23.22	16.0	1	4	4	24.16	9	10.0	5	4	25	9	7	9	6	5	26	1	5	7	13.7	5.26	54	3	6			
32	9.3	7	23.57	4	3	10.4	7	24.50	17.2	1	11.6	8	25.44	18.0	11.0	7	8	26.36	8	9	8	9	27.29	7	7	9				
33	4	18.0	24.33	7	4	5	19.1	25.26	6	3	6	20.1	26.19	4	1	7	21.2	27.12	19.2	12.0	8	22.2	28	4	20.0	9				
34	4	3	25.10	17.1	9.6	5	4	26	3	9	4	7	5	26.56	7	3	12.8	5	27.48	5	2	9	6	28.40	4	13.0	0			
35	4	7	25.47	4	7	6	8	26.40	18.3	10.6	7	9	27	33	19.1	4	8	9	28.25	9	3	14.0	23.0	29.17	7	2				
36	5	19.1	26.26	8	9	6	20.2	27	19	7	7	11.8	21.3	28	12	5	11.6	9	22.3	29	4	20.3	5	0	4					
37	9.5	5	27	6	18.2	10.0	10.7	6	27	59	19.0	9	8	7	28	51	9	7	9	7	29	43	7	12.6	1					
38	6	9	27	47	6	2	7	21.0	28	39	4	11.0	9	22.1	29	31	20.3	9	13.0	23.2	0	23	21.1	8	22.4					
39	6	20.4	28.29	19.0	3	8	5	29	21	2	9	5	0	13	7	12.1	0	6	1	4	5	9	2	7	15.5					
40	6	8	29	12	4	5	8	9	0	4	20.3	4	12.0	23.0	0	56	21.1	2	124.1	1	47	9	13.1	14.3	25.1					
41	6	21.3	29	57	9	7	9	22.4	0	48	7	6	1	5	140	5	4	1	6	230	22.3	3	4	6	321	23.1				
42	9.7	8	043	20.3	9	11.0	9	134	21.1	7	124.0	2	25	9	6	225.1	3	15	7	23	5	5	3	6	27.3	4	55			
43	7	22.3	130	8	11.1	0	23.4	221	6	9	2	5	3	12	22.4	8	13.3	6	4	223.1	6	5	2	8	125	22.3	3			
44	8	9	219	21.3	3	1	24.0	310	22.1	12.1	2	25.0	4	0	8	13.0	4	26.1	4	50	6	8	6	27.2	5	39	24.4			
45	9	23.4	310	7	5	2	5	4	0	5	3	12.3	6	450	23.3	2	4	7	5	39	24.1	14.0	14.6	8	6	29.0	7	16		
46	9	24.0	4	222.2	7	2	25.1	4	52	23.0	5	3	26.2	5	41	8	3	5	27.3	6	30	6	2	7	28.4	7	18			
47	10.0	6	456	7	9	11.3	7	545	5	7	4	8	6	34	24.2	5	13.6	9	7	23	25.1	4	8	29.0	8	11				
48	1	25.3	552	23.2	12.1	3	26.4	641	24.0	9	5	27.5	7	29	7	7	7	28.6	8	17	6	6	9	7	9	52	27.1	2		
49	1	26.0	650	7	3	427.1	7	38	5	13.1	12.6	28.2	8	26	25.3	9	8	29.3	9	13	26.1	8	15.0	0	4	10	0	8	6	
50	2	7	750	24.3	5	5	8	838	25.1	3	7	29.0	9	25	8	14.1	9	0.1	10	12	6	15.0	1	12	10	58	27.3	8		
51	3	27.5	853	9	8	6	28.6	940	7	6	8	8	10	26	26.4	3	14.0	9	11	12	27.2	2	2	20	11	58	9	16.1		
52	10.4	28.4	958	25.5	13.0	11.7	29.5	1044	26.3	9	9	0.7	11	30	27.0	6	2	18	12	15	8	5	3	9	13	0	28.5	3	6	
53	5	29.3	11	526.1	2	8	0.5	11	50	9	14.1	13.0	1.7	12	35	6	8	3	28	13	20	28.4	7	15.5	3	9	14	4	9	3
54	6	03	1215	8	5	8	1.5	12	59	27.5	3	1	2.7	13	44	28.2	15.1	4	3	8	14	27	29.0	16.0	6	4	9	15	11	5
55	7	14	1328	27.5	8	9	2.6	14	11	28.2	6	2	3.8	14	54	9	4	5	4	9	15	37	6	2	8	6	1620	0	3170	
56	8	26	1443	28.2	14.1	12.0	3.8	15	26	9	9	3	5.0	16	829.6	7	7	6	2	16	50	0.3	5	9	7.3	17	32	10	3	1

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

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UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.					H. M. S.					H. M. S.					H. M. S.					H. M. S.																	
SID. T. 22 49 53 } X					22 53 37 } X 12°					22 57 20 } X 13°					23 1 3 } X 14°					23 4 46 } X 15°																	
ARC 342° 28'.2 } 11°					343° 24'.1 }					344° 20'.0 }					345° 15'.7 }					346° 11'.4 }																	
H.	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3												
Lat.	♀	8	II	25	8	♀	8	II	25	8	♀	8	II	25	8	♀	8	II	25	8	♀	8	II	25	8												
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°												
22	14.4	19.9	23	6	17.4	12.4	15.4	20.9	23	59	18.2	13.3	16.5	21.9	24	50	19.0	14.2	17.6	22.9	25	42	19.9	15.1	18.6	23.9	26	34	20.7	16.0	19.7	24.8	27	26	21.6	16.9	
23	4	20.2	23	34	7	5	5	21.2	24	27	5	4	6	22.2	25	19	3	3	6	23.2	26	11	20.2	2	7	24.1	27	3	21.0	1	7	25.1	27	55	8	17.0	
24	5	4	24	4	18.0	6	5	4	24	57	8	5	6	5	25	49	6	4	7	4	26	41	4	3	7	4	27	32	3	2	8	4	28	24	22.1	1	
25	5	7	24	34	3	7	6	7	25	27	19.1	6	7	8	26	19	9	5	7	7	27	10	7	4	8	7	28	2	6	3	9	7	28	53	4	2	
26	14.6	21.0	25	4	6	9	6	22.0	25	57	4	7	16.7	23.1	26	49	20.2	14.6	17.8	24.0	27	41	21.0	15.5	9	25.0	28	32	9	4	9	26.0	29	24	7	3	
27	6	3	25	35	9	13.0	15.7	3	26	28	7	9	8	4	27	20	5	8	8	3	28	11	3	6	9	3	29	3	22.2	16.5	20.0	3	29	54	23.0	4	
28	7	6	26	7	19.2	1	7	6	27	0	20.0	14.0	8	7	27	51	8	9	9	7	28	43	7	8	19.0	7	29	34	5	6	1	7	0	25	3	17.5	
29	7	9	26	39	5	2	8	9	27	32	3	1	9	24.0	28	23	21.2	15.0	18.0	25.0	29	15	22.0	9	1	26.0	0	6	8	8	1	27.0	0	57	6	6	
30	14.8	22.2	27	12	8	4	9	23.3	28	5	7	2	17.0	3	28	56	5	1	0	3	29	47	3	16.0	1	3	0	38	23.1	9	2	3	1	29	9	8	
31	8	6	27	46	20.2	13.5	9	6	28	38	21.0	4	0	6	29	29	8	3	1	6	0	20	6	1	2	6	1	11	4	17.0	20.3	6	2	2	24.3	9	
32	9	9	28	20	5	6	16.0	9	29	12	3	14.5	1	25.0	0	3	22.1	4	2	26.0	0	54	9	3	3	27.0	1	45	8	1	4	28.0	2	36	6	18.0	
33	15.0	23.3	28	56	8	8	1	24.3	29	47	7	6	2	3	0	38	5	15.5	3	3	1	29	23.3	4	19.3	4	2	20	24.1	3	4	4	3	10	9	1	
34	0	6	29	32	21.2	9	1	7	0	23	22.0	8	2	7	1	14	8	6	18.3	7	2	5	6	16.5	4	8	2	55	4	4	5	8	3	45	25.2	3	
35	1	24.0	0	9	5	14.0	2	25.1	1	0	4	9	17.3	26.1	1	51	23.2	8	4	27.1	2	41	24.0	7	5	28.2	3	32	8	17.5	20.6	29.2	4	21	6	4	
36	1	4	0	47	9	2	3	5	1	38	7	15.1	4	5	2	28	5	9	5	5	3	19	3	8	6	6	4	9	25.1	7	7	6	4	58	9	18.5	
37	2	8	1	25	22.3	3	16.3	9	2	16	23.1	2	5	9	3	6	9	16.1	6	28.0	3	57	7	9	19.7	29.0	4	46	5	8	8	□	5	36	26.3	7	
38	15.3	25.3	2	5	7	5	4	26.3	2	56	5	4	5	27.4	3	45	24.3	2	18.7	4	4	36	25.0	17.1	7	5	5	25	8	9	9	0.5	6	14	6	8	
39	4	7	2	46	23.0	7	4	8	3	36	8	5	17.6	8	4	26	6	4	8	9	5	16	4	2	8	9	6	5	26.2	18.1	21.0	9	6	54	27.0	19.0	
40	4	26.2	3	27	4	8	5	27.3	4	18	24.2	7	7	28.3	5	7	25.0	5	8	29.4	5	56	8	4	9	0.4	6	45	6	3	0	1.4	7	34	4	1	
41	5	7	4	10	8	15.0	16.6	8	5	0	6	8	8	9	5	49	4	7	9	9	6	38	26.2	6	20.0	9	7	27	27.0	4	1	2	0	8	16	8	3
42	6	27.3	4	55	24.3	2	7	28.3	5	44	25.1	16.0	9	29.4	6	33	8	9	19.0	0.4	7	22	6	7	1	1.5	8	10	4	6	2	5	8	58	28.2	4	
43	15.6	8	5	40	7	3	8	9	6	29	5	2	18.0	II	7	18	26.3	17.0	1	1.0	8	6	27.0	9	2	2.0	8	54	8	7	3	3.0	9	42	6	19.6	
44	7	28.4	6	28	25.2	5	9	29.5	7	16	9	4	1	0.6	8	5	7	2	2	6	8	52	5	18.1	3	6	9	40	28.3	9	21.5	6	10	27	29.0	7	
45	8	29.0	7	16	6	7	17.0	0.1	8	4	26.4	6	2	1.2	8	53	27.2	4	3	2.2	9	40	9	2	20.4	3.2	10	27	7	19.1	6	4.2	11	14	5	9	
46	9	6	8	6	26.1	8	1	7	8	54	8	7	3	8	9	42	6	6	4	8	10	29	28.4	3	6	8	11	16	29.1	3	7	8	12	2	9	20.0	
47	16.0	0.3	8	58	6	16.0	2	1.3	9	46	27.3	9	4	2.4	10	33	28.1	7	19.5	3.4	11	19	8	5	7	4.4	12	5	5	4	9	5.5	12	51	0.4	2	
48	1	9	9	52	27.1	2	3	9	10	39	8	17.1	18.5	3.1	11	25	6	9	7	4.1	12	11	29.3	7	8	5.1	12	57	8	6	22.0	6.2	13	42	8	4	
49	2	1.6	10	47	6	4	17.4	2.6	11	33	28.3	3	6	8	12	19	29.1	18.1	8	9	13	5	8	9	21.0	8	13	49	0.5	8	1	9	14	35	1.3	6	
50	3	2.3	11	44	28.1	6	5	3.4	12	29	8	5	7	4.5	13	15	6	3	9	5.6	14	0	0.3	19.1	1	6.6	14	44	1.0	9	3	7.7	15	29	8	8	
51	16.4	3.1	12	43	7	8	6	4.2	13	28	29.4	7	9	5.3	14	12	0.1	5	20.1	6.4	14	57	8	3	3	7.4	15	41	5	20.1	5	8.5	16	24	2.3	21.0	
52	6	4.0	13	44	29.3	17.1	8	5.1	14	28	8	18.0	19.0	6.2	15	12	7	7	2	7.3	15	56	1.4	5	4	8.3	16	40	2.1	3	7	9.4	17	22	8	2	
53	7	5.0	14	48	9	3	18.0	6.1	15	31	0.6	2	2	7.2	16	14	1.3	9	4	8.3	16	57	2.0	8	6	9.3	17	40	7	6	9	10.4	18	22	3.4	4	
54	9	6.1	15	54	0.5	5	1	7.2	16	36	1.2	4	3	8.3	17	18	9	19.1	6	9.3	18	1	6	20.0	8	10.4	18	43	3.3	8	23.0	11.4	19	24	4.0	6	
55	17.0	7.2	17	2	1.1	8	3	8.3	17	44	8	6	5	9.4	18	25	2.5	4	8	10.4	19	6	3.2	22.0	11.5	19	47	9	21.0	2	12.5	20	28	6	8		
56	1	8.5	18	13	8	18.1	4	9.6	18	54	2.5	9	7	10.7	19	34	3.1	7	21.0	11.7	20	15	8	5	2	12.8	20	55	4.5	3	5	13.7	21	35	5.2	22.1	

## TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.						H. M. S.						H. M. S.						H. M. S.														
SID. T. 23 12 10			23 15 52			23 19 33			23 23 15			23 26 56			23 30 37																	
ARC 348° 2'.5						348° 58'.0						349° 53'.4						350° 48'.7						351° 44'.0								
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3			
Lat.	°	°	°	°	°	Lat.	°	°	°	°	°	Lat.	°	°	°	°	°	Lat.	°	°	°	°	°	Lat.	°	°	°	°	°			
22	20.7	25.8	28.17	22.4	17.7	21.8	26.8	29	8	23.2	18.6	22.8	27.7	29	59	24.1	19.5	23.8	28.7	0 50	24.9	20.4	24.9	29.6	1 40	25.7	21.3	25.9	0 6	2 31	26.5	22.2
23	8	26.1	28.46	7	9	8	27.1	29.37	5	7	9	23.0	0 28	3	6	9	29.0	1 18	25.2	5	9	9	2	8	26.0	4	26.0	9	2 59	8	3	
24	8	4 29.15	23.0	18.0	9	4	0	6	8	9	9	3	0 56	6	7	24.0	3	1 47	4	6	25.0	0 2	2 37	3	5	0	1.2	3 27	27.1	4		
25	9	7 29.44	2	1	22.0	7	0 35	24.1	19.0	23.0	6	1 26	9	9	0	6	2 16	7	7	1	5	3	6	5	6	1	5	3 56	4	5		
26	21.0	27.0	0 14	5	2	0 28.0	1	5	4	1	1	9	1 55	25.2	20.0	1	9	2 46	26.0	9	2	9	3 36	8	7	2	8	4 26	6	22.6		
27	0	3	0 45	8	3	1	3	1 35	7	2	2	2 29.3	2 26	5	1	2	0 2	3 16	3 21.0	3	1.2	4	6	27.1	8	26.3	2.1	4 56	9	7		
28	1	6	1 16	24.1	4	2	6	2	6	25.0	3	2	6	2 56	8	2	2 4.3	5	3 46	6	1	25.3	5	4 36	4	22.0	4	5	5 26	25.2	8	
29	2 28.0	1 48	4 18.5	22.3	9	2 38	3	4	23.3	9	3 28	26.1	3	4	9	4 18	9	2	4	8	5	7	7	1	5	8	5 57	5	9			
30	3	3	2 20	8	6	3 29.3	3 10	6	19.5	4	0.2	4	0	4	4	5	1.2	4 49	27.2	3	5	2.2	5 39	28.0	2	6	3.1	6 28	8 23.1			
31	21.4	6	2 52	25.1	8	4	6	3 43	9	7	5	6	4 32	7	20.5	6	6	5 22	5	4	6	5	6 11	3	3 26.7	5	7	0 29.1	2			
32	4 29.0	3 26	4	9	5	Π	4 16	26.2	8	6	9	5	6 27.0	6	24.7	9	5 55	8 21.5	25.7	9	6 44	6	4	8	9	7 33	4	3				
33	5	4	4 0	7 19.0	22.6	0 4	4 50	5	9	23.7	1.3	5 39	3	8	8	2.3	6 28	28.1	6	8	3.3	7 17	9 22.5	9	4.2	8	6	7	4			
34	6	8	4 35	26.0	1	7	8	5 25	8	20.0	8	7	6 14	6	9	9	7	7 3	4	8	9	7	7 51	29.2	6	27.0	6	8 40	8	23.5		
35	21.7	0.2	5 11	4	3	8	1.2	6	0 27.2	1	9	2.1	6 49	28.0	21.0	25.0	3.1	7 38	8	9	26.0	4.1	8 26	6	8	1	5.1	9 15	0.4	6		
36	8	6	5 47	7	4	9	6	6 36	5	3 24.0	6	7 25	3	1	1	5	8 13	29.1	22.0	1	5	9	2	9	9	2	5	9 50	7	7		
37	9	1.0	6 25	27.1	19.5	23.0	2.0	7 13	9	4	1	3.0	8 2	7	3	2	4.0	8 50	4	1	2	5.0	9 39	0 2	23.0	3	9 10 26	1 0	9			
38	9	4	7 3	4	7	1	4	7 51	28.2	20.5	2	4	8 40	29.0	4	3	4	9 28	8	3	4	4 10 15	6	1	27.4	6 4 11	3	4 24.0				
39	22.0	9	7 42	8	8	2	9	8 30	6	7	3	9	9 18	4 21.5	4	9	10	6 0.2	4 26.5	9 10 53	9	3	6	9 11 41	7	1						
40	1	2.4	8 22	28.2	20.0	3	3.4	9 10	29.0	8	4	4.4	9 58	7	7	25.5	5.4	10 45	5 22.5	6	6 4	11 32	1.3	4	7	7 4	12 19	2 1	3			
41	2	3.0	9 3	6	1	4	4.0	9 51	4 21.0	24.5	5.0	10 38	0.1	8	6	9 11	26	9	7	7	9 12	12	7 23.5	8	9 12 59	5	4					
42	3	5	9 46	29.0	3 23.6	5 10 33	8	1	7	5 11	20	5 22.0	7	6 4	12	7	1.3	8	9	7.5	12 53	2.1	7	28.0	8 5 13 39	8 24.5						
43	22.5	4.0	10 29	4	4	7	5.0	11 17	0.2	3	8	6 0 12	3	9	1	8	7.0	12 49	7 23.0	27.0	8 1 13 35	5	8	1	9 0 14 21	3 2	7					
44	6	6	11 14	8	6	8	6 12	1	6	4	9	6 12 47	1.3	3	9	6 13 33	2.1	1	1	7 14 19	9 24.0	3	6 15 4	6	8							
45	7	5.2	12 0	0.3	8	9	6.2	12 46	1.0	21.6	25.0	7.2	13 32	8	5	26.1	8.2	14 15	5 3	2	9 3 15	3 3.3	1	4 10 2 15 45	4 0 25 0							
46	9	9 12 47	7	21.0	24.0	9 13 33	5	8	2	9 14 19	2.2	22.6	3	8 15	4	3.0	5	4	9 15 48	7	3 28.5	9 16 33	5	1								
47	23.0	6.6	13 36	1.2	1	2	7.5	14 22	9	9	3	8.6	15 7	6	7	5 9.5	15 51	4 23.6	27.6	10 6 16 35	4.1	4	7 11.6	17 20	9	2						
48	1	7.2	14 26	6	2	4	8.2	15 12	2.3	22.0	5	9.3	15 56	3.0	9	7	10.2	16 40	8	8	8 11.3	17 23	5 24.5	9 12 3 18	8 5 3							
49	3	9 15 18	2.0	4	5	9.0	16 3	8	2	6 10.0	16 47	5 23.1	8	9 17 30	4.2	9	9 12.0	18 13	5.0	7	29 1 13 0	18 57	7 25.5									
50	5	8.7	16 12	5	6	6	7 16 56	3.3	4	8	7 17 39	4.0	3	27 0 11.7	18 22	7	24.1	28.1	7 19	5	5	9	3	7 19 48	6 2							
51	7	9.5	17 8	3.0	8	8	10.5	17 51	8	6	26.0	11.5	18 33	5	5	2 12.5	19 16	5 2	3	4 13.5	19 58	6.0	25.1	5 14 5	20 40	7	9					
52	9	10.4	18 5	5	5	22.0	25.1	11.4	18 47	4 3	8	3 12.4	19 29	5 0	7	4 13.4	20 11	7	4	6 14 4	20 53	8	3	8 15 4	21 34	7 2 26.1						
53	24.1	11.4	19 5	4.1	2	3	12.4	19 46	8 23.0	5 13.4	20 27	5	8	7 14.4	21 8	6.2	6	8 15 4	21 50	7.0	5	8	16 4 22 30	7	3							
54	2	12.5	20 6	7	4	5 13.5	20 46	5.4	2	7 14.5	21 27	6 1 24.0	9 15.5	22 7	8	8	29 1 16 4	22 48	5	7	0 2 17 4	23 28	8.2	5								
55	4	13.6	21 9	5.3	6	7 14.6	21 49	6.0	4	9 15.6	22 29	7	2 28.1	16 6 13	9	7.4	25.0	3 17.5	23 48	8.1	9	8 18 5	24 28	8	7							
56	6	14.9	22 14	9	9	26.0	15.9	22 54	6	7	27.1	16.8	23 33	7.3	5	3 17.8	24 12	8.0	3	5 18 7	20 50	7.2	2	7 19 7	25 29	9.4	9					

TABLE OF HOUSES FOR LATITUDES  $22^{\circ}$  TO  $56^{\circ}$ .

## UPPER MERIDIAN, CUSP OF 10th H.

H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.				H. M. S.										
SID. T. 23 30 37				23 34 18				23 37 58				23 41 39				23 45 19				23 48 59										
ARC 352° 39' 22"				353° 34' 4				354° 29' 6				355° 24' 7				356° 19' 8				357° 14' 8										
H	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3	11	12	1	2	3					
Lat.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°						
22	25.9	0.6	2.31	26.5	22.2	26.9	1.5	3.20	27.4	23.1	27.9	2.4	4.11	28.2	24.0	28.9	3.4	5.1	29.0	24.9	0.0	4.3	5.50	29.8	25.8					
23	26.0	9	2.59	8	3	27.0	8	3.49	6	2	28.0	7	4.39	5	1	29.0	7	5.29	3	25.0	1	6	6.18	0.1	9					
24	0	1.2	3.27	27.1	4	1	2.1	4.17	9	3	1	3.0	5.7	7	2	1	4.0	5.57	5	1	1	9	6.46	4	26.0					
25	1	5	3.56	4	5	2	4	4.46	28.2	4	2	4	5.36	29.0	3	2	3	6.25	8	2	2	5.2	7.15	6	1	3				
26	2	8	4.26	6	22.6	3	7	5.15	5	5	3	7	6.5	3	4	3	6	6.54	0.1	3	3	6	7.43	9	2	4				
27	26.3	2.1	4.56	9	7	27.3	3.1	5.45	7	23.6	4	4.0	6.34	6	24.5	4	5.0	7.24	4	4	0.4	9	8.13	1.2	3	1.5				
28	4	5	5.26	28.2	8	4	4	6.15	29.0	7	28.5	3	7	4	8	6	29.5	3	7.54	6	25.5	5	6.2	8.42	5	4	6			
29	5	8	5.57	5	9	5	7	6.46	3	8	6	7	7.35	0.1	7	6	6	8.24	9	6	7	6	9.13	7	26.5	7				
30	6	3.1	6.28	8	23.1	6	4.1	7.17	6	9	7	5.0	8.6	4	8	7	6.0	8.55	1.2	7	8	9	9.43	2.0	6	8				
31	26.7	5	7	0.29.1	2	27.7	4	7.49	9	24.0	8	4	8.38	7	9	8	3	9.26	5	8	9	7.2	10.15	3	7	9				
32	8	9	7.33	4	3	8	8	8.22	0.2	2	9	7	9.10	1.0	25.0	9	7	9.59	8	9	1.0	6.10	46	6	8	2.0				
33	9	4.2	8.6	7	4	9	5.2	8.55	5	3	29.0	6.1	9.43	3	1	8	7.1	10.31	2.1	26.0	1	8.0	11.19	9	9	2	9.0			
34	27.0	6	8.40	8	23.5	28.0	6	9.28	8	4	1	5.10	16	6	3	0.2	5.11	4	4	1	2	4.11	52	3.2	27.0	3				
35	1	5.1	9.15	0.4	6	1	6.0	10	3	1.2	24.5	2	7.0	10.51	2.0	4	3	9.11	38	8	2	4	8.12	26	5	1				
36	2	5	9.50	7	7	3	5.10	13	8	5	6	3	4.11	25	3	25.5	4	8.3	12	13	3.1	4	1.5	9.3	13	0				
37	3	9.10	26	1.0	9	4	9.11	13	8	7	29.5	9	12	1	6	6	5	8.12	48	4	26.5	6	7	13	35	4.2				
38	27.4	6.4	11	3	4	24.0	28.5	7.4	11.50	2.2	9	6	8.3	12	37	3.0	7	0.7	9.3	13	24	7	6	8	10.2	14	11			
39	6	9.11	41	7	1	6	9.12	28	5	25.0	7	8	13	14	3	8	8	8.14	1	4.1	7	9	7.14	48	9	6				
40	7	7.4	12	19	2.1	3	8	8.4	13	6	8	1	8	9.3	13	53	6	26.0	9	10.3	14	39	4	8	2.0	11.2	15	25		
41	8	9	12	59	5	4	9	9	13	45	3.1	2	8	8.14	32	4.0	1	1.1	8	15	18	8	27.0	1	7	16	3	6	8	
42	28.0	8.5	13	39	8	24.5	29.1	9.4	14	26	5	4	0.1	10.4	15	12	4	2	2	11.3	15	57	5.2	1	3	12.2	16	43	9	
43	1	9.0	14	21	3.2	7	2	10.0	15	7	9	25.5	3	9	15	53	7	4	4	9	16	38	5	2	5	8	17	23	6.3	
44	3	6	15	4	6	8	4	6	15	50	4.3	7	4	11.5	16	35	5.1	26.5	6	12.5	17	20	9	4	6	13.4	18	4	7	
45	4	10.2	15	48	4.0	25.0	5	11.2	16	33	7	8	6	12.2	17	18	5	7	7	13.1	18	2	6.3	27.5	8	11.1	14	58	3	
46	28.5	9	16	33	5	1	7	9	17	18	5.1	26.0	8	8	18	2	9	8	9	7	18	46	7	7	2	12.1	16	11	9	
47	7	11.6	17	20	9	2	9	12.5	18	4	5	1	1.0	13.5	18	48	6.3	9	2.1	14.4	19	31	7.1	8	2	15.4	20	15	9	
48	9	12.3	18	8	5.3	3	8	13.2	18	51	9	2	2	14.2	19	35	7	27.1	3	15.1	20	18	5	9	4	16.1	21	1	8.3	
49	29.1	13.0	18	57	7	25.5	0.2	14.0	19	40	6.4	4	4	9	20	23	7.1	2	5	8.21	6	9	28.1	6	8	21	48	7	9	
50	3	7	19	48	6.2	7	4	7	20	31	9	6	6	15.6	21	13	6	4	7	16.6	21	55	8.4	2	8	17.5	22	37	9.1	
51	5	14.5	20	40	7	9	7	15.5	21	22	7.4	8	8	16.4	22	4	8.1	6	9	17.4	22	45	8	4	4.1	18.3	23	27	5	
52	8	15.4	21	34	7.2	26.1	9	16.4	22	16	9	27.0	2	0	17.3	22	57	6	8	3.2	18.3	23	38	9.3	6	4	19.2	24	19	10.0
53	8	16.4	22	30	7	3	1.2	17.3	23	11	8.4	1	2	18.3	23	52	9.1	28.0	4	19.2	24	31	8	8	7	20.1	25	12	5	
54	0.2	17.4	23	28	8.2	5	4	18.3	24	8	9	3	5	19.3	24	48	6	1	7	20.2	25	27	10.3	9	9	21.1	26	7	11.0	
55	5	18.5	24	28	8	7	7	19.4	25	7	9.5	5	8	20.4	25	46	10.1	3	4.0	21.3	26	25	8	29.1	5.2	22.2	27	4	5	
56	7	19.7	25	29	9.4	9	2.0	20.6	26	8	10.1	7	3.2	21.6	26	46	7	5	3	22.5	27	24	11.4	4	5	23.4	28	2	12.1	

# TABLE OF HOUSES FOR LATITUDES 22° TO 56°.

## UPPER MERIDIAN, CUSP OF 10th H.

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SID. T.	H. M. S.					H. M. S.					H. M. S.							
	23 52 40 } $\times$ 28°					23 56 20 } $\times$ 29°					24 0 0 } $\times$ 0°							
ARC	358° 9'.9					359° 5'.0					360° 0'.0							
H.	11	12	1	2	3	H.	11	12	1	2	3	H.	11	12	1	2	3	
Lat.	8	II	25	8	8	8	II	25	8	8	8	8	II	25	8	8	8	
22°	2.0	6.1	7.29	1.5	27.6	3.0	7.0	8.19	2.3	28.5	4.0	7.9	9.8	3.2	29.4			
23	1	4	7.57	8	7	1	3	8.46	6	6	1	8.2	9.35	4	5			
24	2	7	8.25	2.0	8	2	6	9.14	8	7	2	6.10	3	7	6			
25	3	7.1	8.53	3	9	3	8.0	9.42	3.1	8	3	9.10	31	9	7			
26	4	4	9.22	5	28.0	4	3	10.10	4	9	4	9.2	10.59	4.2	29.8			
27	2.5	7	9.51	8	1	3.5	6.10	39	6	29.0	4.5	6.11	27	5	8			
28	6	8.1	10.20	3.1	2	6	9.0	11	9	9	0	6	9.11	56	7	9		
29	7	4	10.50	4	3	7	3	11	38	4.2	1	7	10.2	12.26	5.0	mg		
30	8	7	11.20	7	3	8	7.12	8	5	2	8	6.12	56	3	0.1			
31	9	9.1	11.51	9	28.4	4.0	10.0	12.39	8	29.3	9.11.0	13.26	6	2				
32	3.1	5	12.23	4.2	5	1	4	13.10	5.0	4	5.0	3	13.57	8	3			
33	2	9	12.55	5	6	2	8	13.42	3	5	2	7	14.29	6.1	4			
34	3	10.3	13.27	8	7	4	11.2	14.15	6	6	3	12.1	15	1	4	5		
35	5	7	14	1	5.1	9	4.5	6.14	47	9	29.7	4	5.15	34	7	0.6		
36	3.6	11.1	14.34	5	29.0	7	12.1	15.21	6.2	8	5.6	13.0	16	8	7.0	7		
37	8	6	15	9	8	1	8	5.15	55	6	9	7	4	16	42	3	8	
38	9	12.1	15.44	6.1	2	5.0	13.0	16.30	9	0.1	9	9	17	16	7	9		
39	4.0	5	16.20	4	3	1	5	17	6	7.2	2	6.1	14.4	17.52	8.0	1.0		
40	1	13.0	16.57	7	4	2	14.0	17.43	5	3	3	9	18	28	3	1		
41	3	6	17.35	7.0	29.5	4	5	18	20	9	4	4	15.4	19	5	7	2	
42	5	14.1	18.13	4	7	6	15.0	18.58	8.3	0.5	6	9	19	43	9.0	4		
43	7	7	18.53	7	8	8	6	19	38	6	6	8	16.5	20	22	3	5	
44	9	15.3	19.33	8.1	9	6.0	16.2	20	18	9.0	8	7.0	17.1	21	1	6	1.6	
45	5.1	9	20	15	5	mg	2	8	20	59	4	9	2	7	21	42	10.0	7
46	2	16.5	20.57	9	0.1	4	17.4	21	41	7	1.0	5	18.3	22	24	4	8	
47	4	17.2	21	41	9.3	2	5	18.1	22	24	10.1	1	7	19.0	23	7	8	9
48	6	9	22	26	7	4	7	8	23	8	5	2	9	7	23	51	11.2	2.1
49	8	18.6	23	12	10.1	5	9	19.5	23	54	9	4	8.1	20.4	24	36	6	2
50	6.0	19.4	24	0	5	7	7.1	20.3	24	41	11.3	1.5	3	21.2	25	22	12.0	3
51	3	20.2	24	49	9	9	4	21.1	25	30	7	7	6	22.0	26	10	4	4
52	6	21.1	25	39	11.4	1.1	7	22.0	26	20	12.1	9	9	9	26	59	8	6
53	9	22.0	26	31	9	2	8.0	9	27	11	6	2.0	9.2	23.8	27	50	13.3	8
54	7.2	23.0	27	25	12.4	4	3	23.9	28	4	13.1	1	5	24.8	28	43	8	3.0
55	5	24.0	28	20	9	5	6	24.9	28	59	6	3	8	25.8	29	37	14.3	1
56	8	25.1	29	18	13.4	7	9	26.0	29	55	14.1	5	10.1	27.0	0	32	8	3

## POSTSCRIPT.

As the tabular spherical basis here built fails to cover a considerable zone near the equator, and figures are often wanted for latitudes less than 22°, the formula for their calculation is added and can be used by any one a little versed in trigonometry; and any part of the Table may also be tested thereby.

(1) To the R. A. of the M. C. add 30°, 60°, or 90°, or so on, according to the place of the house in order from the meridian, which will give the oblique ascension of its cusp. Express this in distance, forward or backward, from  $\varphi$  0 or  $\Delta$  0, whichever be the nearer, and call it  $d$ . Call the ecliptic obliquity  $O$ .

Then,  $\cos d \cot \text{pole} = \cot A$ .

And the sum, or difference, of  $A$  and  $O$  (according as  $d$  measures from  $\varphi$  or  $\Delta$ ) =  $B$ .

Then, see  $B \cos A \tan d = \tan \text{long.}$  required, to be reckoned from  $\varphi$  or  $\Delta$  as  $d$  was; unless  $B$  exceed 90°, when the longitude is reckoned from the opposite equinox, reversely.

For South latitude, first add 180° to the R. A. of the M. C., and proceed as above; but in the final result put opposite zodiacal signs for those found on the minor houses.

The poles below latitude 10° are given in the annexed extension to the equator of table D.

Lat.	11th and 12th and	
	3d H.	2d H.
°	°	°
0	0	0
1	0	20.0
4	1	20.1
7	2	20.7
10	3	21.9
		42.4

(2) On the equator the previous formula becomes simply  $\frac{\tan d}{\cos O} = \tan$  long., to be reckoned as above. Hence a better method than the other would be to compute the longitude for latitude 0, and then interpolate by trial between that and 22°, by aid of the tabular differences in each column. It can often be done by mere inspection. In this way any part of the Table can be completed to the equator with sufficient accuracy, as interpolation in that interval is easy.

For latitudes from 56° to 60°, follow precepts and formula of Art. (1). Interpolation for such high latitudes is not so simple, but should allow for second differences in using table D.

For latitude more than 60° special calculations must be made.

J. G. D.

July, 1903.

\* To convert ecliptic longitude into R. A., express the long. in distance (forward) from the nearest cardinal point, then, if from  $\varphi$  or  $\Delta$ ,  $\tan \text{R. A.} = \tan \text{long.} \cos O$ ; if from  $25$  or  $5$ , use  $\cot$  instead of  $\tan$ .

TABLES OF HOUSES FOR  
Latitude 57° 9' N.

TABLES OF HOUSES FOR  
Latitude 57° 9' N.

Sidereal 10/11/12 Ascen 2 3			Sidereal 10/11/12 Ascen 2 3			Sidereal 10/11/12 Ascen 2 3			Sidereal 10/11/12 Ascen 2 3		
Time.	$\Sigma \Omega$	$\Delta \omega$	Time.	$\Sigma \Omega$	$\Delta \omega$	Time.	$\Sigma \Omega$	$\Delta \omega$	Time.	$\Sigma \Omega$	$\Delta \omega$
h. m. s.	° ' "	° ' "	h. m. s.	° ' "	° ' "	h. m. s.	° ' "	° ' "	h. m. s.	° ' "	° ' "
0 0 0	0 0 0	0 0 0	0 11 28	1 30 16	4	1 61 38	0 13 22	19	4 48	6 28	24
0 29 23	6 17 45	6	1 65 66	1 24 22	20	3 53 23	1 21 27	24	5 26	11	20
0 7 20	2 13 27	2	1 69 18	1 24 33	21	2 58	2 21	6	5 45	25	24
0 11 1	3 16 1	3	2 7	3	8	3 16 24	1 21 22	16	9	1	12
0 14 41	4 16 1	4	2 7	2	7	4 16 25	2 21 22	16	9	1	12
0 16 21	5 17 2	4	2 10	62	2	6 17 26	2 22	16	9	1	12
0 22 2	6 18 3	5	2 14	44	2	6 18 26	2 23	16	9	1	12
0 26 7	7 19 4	6	2 18	37	2	6 19 27	2 24	16	9	1	12
0 29 23	8 20 1	6	2 22	31	2	6 20 21	2 24	16	9	1	12
0 33 4	9 21 6	7	2 26	36	2	6 21 26	2 25	16	9	1	12
0 38 46	10 22 6	7	4 27	22	6	3 21 10	2 23	26	13	7	1
0 40 21	11 23 7	8	4 28	11	7	3 24 11	2 23	26	13	7	1
0 44 8	12 24 6	8	4 29	14	7	3 24 12	2 24	27	13	7	1
0 47 6	13 25 6	9	4 30	11	13	4 02 13	2 24	27	13	7	1
0 61 32	14 26 0	9	4 31	10	14	4 03 14	2 25	28	13	7	1
0 66 14	15 26 10	10	4 42	20	10	2 60	9 16 27	3 20	12	11	8
0 68 67	16 29 11	11	18	27	11	2 64	9 17 26	3 20	12	11	8
1 1 2	17 30 12	11	2 64	27	17	2 63	9 17 29	4	0 02 30	12	11
1 6 24	18 1 12	12	3 28	18	3	2 68	18 30	6	1	9 10 14	13
1 10 7	19 2 13	13	3 29	19	3	3 0 10 15	6	1	2 07 20	16	7
1 13 6 20	3 14 13	13	4 39	20	3	3 14 10 21	1	0 7	2	27 21 16	6
1 17 36 20	4 15 13	13	4 39	20	3	3 14 10 21	2	7	3	0 22 16	6
1 21 22	5 16 14	14	5 55	1 22	3	3 18 19 22	3	8	3	4 22 17	6
1 25 6 23	6 16 15	14	5 56	1 22	3	3 22 19 23	4	9	4 23 18	6	1
1 28 6 24	7 17 16	15	5 57	1 23	3	3 26 23 24	6	9	4 24 19	6	1
1 32 38 26	8 18 16	16	4 55	1 23	3	3 30 35 25	6 10	5	4 41 25 20	6	1
1 36 28 26	9 19 17	17	2 1 26	3 34	49	27	6 12	7	4 46 26 21	6	1
1 40 13 27	10 19 17	17	6 48	2 38	5	3 38 49 27	6 12	7	4 46 26 21	6	1
1 44 1 28 11	20 18	18	9 44	3 42	5	3 42 57 26	9 13	7	4 47 27 23	6	1
1 47 49 29	12 21 19	11	11 6 27	6 59	3	3 49 59 10	1 21	23	5 6 34 28 23	6	1
1 51 38 30	13 21 19	11	11 6 27	7	8 51	1 6 30 11 14	9	4 24 24	6	0 0 30 6 8 30	22
1 51 38 30	13 21 19	11	11 6 27	7	8 51	1 6 30 11 14	9	4 24 24	6	0 0 30 6 8 30	22
Sidereal 10/11/12 Ascen 2 3			Sidereal 10/11/12 Ascen 2 3			Sidereal 10/11/12 Ascen 2 3			Sidereal 10/11/12 Ascen 2 3		
Time.	$\Sigma \Omega$	$\Delta \omega$	Time.	$\Sigma \Omega$	$\Delta \omega$	Time.	$\Sigma \Omega$	$\Delta \omega$	Time.	$\Sigma \Omega$	$\Delta \omega$
h. m. s.	° ' "	° ' "	h. m. s.	° ' "	° ' "	h. m. s.	° ' "	° ' "	h. m. s.	° ' "	° ' "
0 0 0	0 0 0	0 0 0	0 22 9	1 14 13	4	0 35 58	1 22 17	20	6 33 31	6 11	24
0 34 59	1 16 14	4	0 35 58	1 22 17	20	6 41 46	1 20 20	29	6 32 23	6 11	24
0 39 11	1 16 15	5	0 23 20	1	0	6 45 44	9 14	6 28	6 42 23	6 11	24
6 21 47	6 13 12	3	3 32 27	6 29 25	6	10 6 24	16 20 24	10	27 22 6	6 27 27 13	16 12 22
6 28 9	6 14 13	4	6 29 27	6 33 31	6	11 6 24	6 21 25	10	31 8 6	7 28 13	6 23 23
6 34 59	6 16 14	4	6 58 28	7 0 2	3	8 57 62	12 16 11 28	6 25 27 17	10 53 36 12 12	2 17	20 18 29
7 0 48 14	2 21 19	9	6 34 59	6 35 3	4	9 6 63 14 18 12	0	9 28 21	1 11 6 57	20 13 11 1 1	28 14 24
7 6 8 15 22	20 10	3	4 6 39 49	10 15	0	9 5 51 15 19 13	0	48 27	3 11 4 23 9	9 15 16	41 16 26
7 6 47 6 11	16 17 18	7	4 6 39 49	10 15	0	9 6 63 60 11 10 28	13 24 28	10 44 9 10 10	1 18	16 17 22	16 12 22
7 6 62 11	12 16 17	8	3 0 2	3	4	9 6 17 40 17 21 16	2 42 28	4 11 8 26 16 15	6 19	6 42 21 4	6 24 25 8
7 7 3 14 27	24 21 12	11	8 18 6 25	8 21 2	2	9 7 21 46 18 22 16	2 42 30	6 11 15 62 16 17	7 21	6 12 20 19	6 23 26 10
7 7 7 18 25	25 22 12	12	4 21 7	8	2	9 21 46 18 22 16	2 42 30	6 11 15 62 16 17	7 21	6 12 20 19	6 23 26 10
7 7 22 18 19	26 23 13	13	2 21 7	9	3	9 25 48 19 22 16	2 42 31	6 11 15 62 16 17	7 21	6 12 20 19	6 23 26 10
7 7 26 34 20	27 24 14	6	6 10	29 39	20	3 23 17 3	5 81	1 11 23 16 21 19	6 22	16 23 8	16 23 13
7 7 30 40	27 25 14	7	6 10	29 39	21	3 24 17 4	5 86	1 12 23 16 21 20	6 22	16 23 8	16 23 13
7 7 35 6 22	28 25 16	8	20 1	3 23 22	26 16	5 14 31 10 23 26	6 23 27	1 13 30 37 22 20	6 23	31 20 10	32 36 18
7 7 39 10 23	29 26 17	9	10 1	3 23 23	26 16	5 14 31 10 23 26	6 23 27	1 13 30 37 22 20	6 23	31 20 10	32 36 18
7 7 43 33 24	29 27 16	10	8 21	3 24 27 20	6	5 45 16 24 25 20	6 23	4 11 32 37 22 16	6 24	45 1 18	45 1 18
7 7 47 47 55	29 28 17	11	9 49	6 26 28 20	7	6 13	1 41 39 55 22 11 25	16 12 22	7 21	42 23 7	42 23 7
7 7 51 6 11	29 28 16	11	9 53	6 28 28 21	7	6 14	1 44 61 14 23 22 15	16 12 22	7 21	42 23 7	42 23 7
7 7 56 6 12	29 28 18	12	9 58	6 29 27 22	8	21 6 15	1 45 69 27 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 57 6 13	29 28 19	12	9 58	6 29 27 22	8	6 6 16	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 61 6 14	29 28 20	13	10 1	6 30 24 25 21 22	9	6 6 17	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 66 6 15	29 28 21	13	10 1	6 30 24 25 21 22	9	6 6 18	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 71 6 16	29 28 22	14	10 1	6 30 24 25 21 22	9	6 6 19	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 76 6 17	29 28 23	14	10 1	6 30 24 25 21 22	9	6 6 20	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 81 6 18	29 28 24	15	10 1	6 30 24 25 21 22	9	6 6 21	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 86 6 19	29 28 25	15	10 1	6 30 24 25 21 22	9	6 6 22	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 91 6 20	29 28 26	16	10 1	6 30 24 25 21 22	9	6 6 23	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 96 6 21	29 28 27	16	10 1	6 30 24 25 21 22	9	6 6 24	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 101 6 22	29 28 28	17	10 1	6 30 24 25 21 22	9	6 6 25	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 106 6 23	29 28 29	17	10 1	6 30 24 25 21 22	9	6 6 26	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 111 6 24	29 28 30	18	10 1	6 30 24 25 21 22	9	6 6 27	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 116 6 25	29 28 31	18	10 1	6 30 24 25 21 22	9	6 6 28	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 121 6 26	29 28 32	19	10 1	6 30 24 25 21 22	9	6 6 29	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 126 6 27	29 28 33	19	10 1	6 30 24 25 21 22	9	6 6 30	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 131 6 28	29 28 34	20	10 1	6 30 24 25 21 22	9	6 6 31	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 136 6 29	29 28 35	20	10 1	6 30 24 25 21 22	9	6 6 32	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 141 6 30	29 28 36	20	10 1	6 30 24 25 21 22	9	6 6 33	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 146 6 31	29 28 37	21	10 1	6 30 24 25 21 22	9	6 6 34	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 151 6 32	29 28 38	21	10 1	6 30 24 25 21 22	9	6 6 35	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 156 6 33	29 28 39	21	10 1	6 30 24 25 21 22	9	6 6 36	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 161 6 34	29 28 40	21	10 1	6 30 24 25 21 22	9	6 6 37	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 166 6 35	29 28 41	21	10 1	6 30 24 25 21 22	9	6 6 38	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 171 6 36	29 28 42	21	10 1	6 30 24 25 21 22	9	6 6 39	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 176 6 37	29 28 43	21	10 1	6 30 24 25 21 22	9	6 6 40	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 181 6 38	29 28 44	21	10 1	6 30 24 25 21 22	9	6 6 41	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 186 6 39	29 28 45	21	10 1	6 30 24 25 21 22	9	6 6 42	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 191 6 40	29 28 46	21	10 1	6 30 24 25 21 22	9	6 6 43	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7 196 6 41	29 28 47	21	10 1	6 30 24 25 21 22	9	6 6 44	1 46 70 24 21 20	16 12 22	7 21	42 23 7	42 23 7
7 7											

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TABLES OF HOUSES FOR  
Latitude 57° 29' N.

Latitude  $57^{\circ} 29' N.$

## TABLES OF HOUSES FOR

Latitude 67° 29', N.

TABLES OF HOUSES FOR

Latitude 57° 29' N.

## TABLES OF HOUSES FOR

TABLES OF HOUSES FOR  
Latitude 58° 27' N.

Sidereal 10 11 12 Ascen 2			Sidereal 10 11 12 Ascen 2			Sidereal 10 11 12 Ascen 2			Sidereal 10 11 12 Ascen 2		
Time.	Δ	m	Δ	m	w	Δ	m	f	Δ	m	w
W. M. 6.	0	0	0	0	0	0	0	0	0	0	0
12. 0	13. 27	3. 0	13. 18	1. 19	13. 19	13. 55	0. 19	14. 16	6. 1	12. 27	0. 0
12. 3	40	1. 27	14. 27	3. 9	14. 29	13. 55	0. 19	14. 16	6. 1	12. 27	0. 0
12. 7	20	2. 27	15. 23	3. 14	14. 20	13. 69	1. 18	14. 21	6. 1	12. 27	0. 0
12. 11	11	3. 28	16. 26	6. 0	14. 3	13. 81	0. 22	14. 18	5. 1	12. 27	0. 0
12. 14	41	4. 29	16. 20	8. 2	14. 23	13. 70	0. 23	14. 17	5. 1	12. 27	0. 0
12. 18	21	6. 27	17. 07	0. 2	14. 24	14. 10	0. 62	14. 24	8. 4	12. 27	0. 0
12. 22	22	6. 17	1. 0	5. 25	14. 14	14. 44	6. 24	14. 20	9. 4	12. 27	0. 0
12. 25	42	7. 18	1. 1	4. 26	14. 13	14. 37	5. 02	14. 21	7. 1	12. 27	0. 0
12. 29	23	8. 21	0. 1	6. 1	14. 23	14. 22	1. 19	14. 22	8. 1	12. 27	0. 0
12. 33	34	9. 30	2. 2	2. 27	14. 26	14. 26	2. 26	14. 22	8. 1	12. 27	0. 0
12. 36	45	10	4. 20	3	4. 9	14. 20	14. 30	2. 10	14. 22	3. 3	12. 27
12. 40	27	11	4. 21	3	4. 10	14. 11	14. 30	2. 11	14. 22	3. 3	12. 27
12. 44	51	12	5. 22	4	5. 17	14. 12	14. 31	2. 12	14. 22	3. 3	12. 27
12. 47	53	13	6. 22	4	6. 15	14. 13	14. 32	2. 13	14. 22	3. 3	12. 27
12. 51	32	14	7. 23	6	7. 14	14. 14	14. 33	2. 14	14. 22	3. 3	12. 27
12. 55	66	15	8. 24	6	8. 14	14. 15	14. 34	2. 15	14. 22	3. 3	12. 27
12. 58	67	16	9. 24	6	9. 14	14. 16	14. 35	2. 16	14. 22	3. 3	12. 27
13. 0	24	18	10. 25	6	10. 14	14. 17	14. 36	2. 17	14. 22	3. 3	12. 27
13. 3	24	18	10. 26	8	9. 17	14. 19	14. 37	2. 18	14. 22	3. 3	12. 27
13. 10	17	43	10. 26	8	11. 16	14. 20	14. 38	2. 19	14. 22	3. 3	12. 27
13. 13	18	51	10. 27	9	12. 19	14. 21	14. 39	2. 20	14. 22	3. 3	12. 27
13. 17	36	21	12. 28	10	0. 20	14. 13	15. 10	12. 20	6. 1	12. 27	0. 0
13. 21	21	22	13. 29	10	1. 27	14. 13	15. 11	12. 20	6. 1	12. 27	0. 0
13. 25	26	13	14. 29	11	1. 26	14. 13	15. 12	12. 20	6. 1	12. 27	0. 0
13. 28	52	14	15. 21	11	1. 26	14. 17	15. 12	12. 20	6. 1	12. 27	0. 0
13. 31	23	55	16. 11	12	3. 26	14. 18	15. 13	12. 20	6. 1	12. 27	0. 0
13. 36	26	25	16. 11	13	1. 19	14. 19	15. 14	12. 20	6. 1	12. 27	0. 0
13. 40	13	37	17	14	0. 27	14. 23	15. 15	12. 20	6. 1	12. 27	0. 0
13. 44	12	47	18	16	3. 14	14. 28	15. 16	12. 20	6. 1	12. 27	0. 0
13. 47	40	29	19	16	3. 15	14. 23	15. 17	12. 20	6. 1	12. 27	0. 0
13. 61	28	30	19	16	6. 17	14. 27	15. 17	12. 20	6. 1	12. 27	0. 0
18. 21	47	6. 20	12. 19	42	4. 21	20	2. 20	25	1. 18	4. 22	1. 18
18. 28	49	6. 21	14. 23	23	6. 22	20	3. 31	6. 20	18. 23	2. 29	7. 21
18. 30	30	7. 21	16. 23	56	5. 23	20	3. 37	6. 17	22. 24	6. 22	22. 11
18. 34	30	8. 23	18	0. 21	6. 23	20	4. 1	6. 22	22. 25	6. 22	22. 11
18. 38	31	9. 24	19	3. 27	9. 25	20	4. 5	4. 44	9. 0	3. 24	9. 26
18. 39	31	9. 24	19	3. 27	9. 25	20	2. 25	18.	4. 26	14. 21	1. 16
18. 46	31	10	26	21	6. 20	20	2. 25	18.	4. 26	14. 21	1. 16
18. 48	21	6. 20	12. 21	6	4. 51	10	2. 20	25	1. 18	4. 22	1. 18
18. 49	31	7. 21	12. 23	7	4. 51	10	2. 20	25	1. 18	4. 22	1. 18
18. 50	31	8. 21	12. 23	7	4. 51	10	2. 20	25	1. 18	4. 22	1. 18
18. 54	31	9. 21	12. 23	7	4. 51	10	2. 20	25	1. 18	4. 22	1. 18
18. 58	31	10	26	21	6. 20	20	2. 25	18.	4. 26	14. 21	1. 16
18. 60	31	11	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 66	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 68	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 70	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 74	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 76	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 78	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 80	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 84	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 86	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 88	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 90	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 94	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 96	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 98	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 100	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 104	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 106	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 108	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 110	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 114	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 116	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 118	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 120	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 124	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 126	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 128	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 130	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 134	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 136	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 138	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 140	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 144	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 146	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 148	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 150	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 154	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 156	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 158	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 160	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 164	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 166	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 168	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 170	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 174	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 176	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 178	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 180	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 184	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 186	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 188	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 190	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 194	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 196	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 198	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 200	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 204	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 206	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 208	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 212	33	12	23	17	6. 21	20	2. 25	18.	4. 26	14. 21	1. 16
18. 214	33	12	23	17	6. 21						

TABLES OF HOUSES FOR  
Latitude 58° 27'

Sidereal 10 11 12 Aeon 2 3												Sidereal 10 11 12 Aeon 2 3												Sidereal 10 11 12 Aeon 2 3											
Time.			Ω			Time.			Ω			Time.			Ω			Time.			Ω			Time.			Ω								
h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.						
0 18 21	6 18	46	6 42	20	8	2 10	6 62	6 19	27	23	40 10	2	4 12	13	6 16	19	12	49	11	21	12	13	6 16	19	12	49	11	21							
0 22 2	6 19	56	6 29	21	9	2 14	44	6 19	27	24	17	11	9	4 16	27	6 17	20	13	30	3 25	22	13	30	3 25	22	13	30	3 25	22						
0 25 2	6 20	67	7	21	10	2 16	37	6 20	28	24	63	12	6	4 20	41	6 18	20	14	10	4 1	29	12	6	4 20	41	6 18	20	14	10						
0 29 23	8 21	7	40	32	10	2 22	31	6 21	26	21	61	8	23	3 69	37	2 13	17	14	49	1	28	1	12	1	28	1	12	1	28						
0 33 4	9 22	7	15	31	11	2 26	26	6 22	30	26	7 13	6	4 29	11	6 20	22	16	31	5	2	12	1	28	1	12	1	28	1	12						
0 36 46	10 23	8	6	20	23	12	2 30	21	17	11	23	0	220	44	14	7	4 33	26	10	21	23	12	16	61	3	24	16	61	3	24					
0 40 46	10 24	13	6 26	24	13	2 31	21	17	11	23	12	17	11	4 37	42	11	20	14	17	33	1	24	16	61	3	24	16	61	3	24					
0 44 61	12 26	10	0	35	14	2 39	14	12	26	2	246	11	32	28	16	9	4 41	69	12	22	14	17	33	8	6	16	61	3	24						
0 47 60	13 27	10	36	26	14	2 46	11	13	26	3	246	11	32	28	16	9	4 46	78	13	23	25	18	14	61	9	6	16	61	3	24					
0 61	13 28	11	11	26	15	2 46	11	13	27	3	246	11	32	28	16	9	4 47	30	17	28	29	21	40	13	11	16	61	3	24						
0 65 14	16 25	12	11	46	27	13	2 60	9	16	28	4	29	61	17	11	4 64	62	15	25	27	19	36	16	7	16	61	3	24							
0 68 67	16 26	12	11	21	27	17	2 64	7	16	29	61	18	12	4 69	11	16	28	27	20	16	11	6	16	61	3	24									
1 2 40 1	17 11	12	11	66	28	18	2 68	17	15	6	1	61	19	13	5	3	40	14	24	26	12	19	62	12	9	16	61	3	24						
1 6 24 18	18 14	13	32	19	15	2 72	3	22	24	23	5	10	4	23	19	13	29	30	23	21	26	17	28	36	20	19	16	61	3	24					
1 10 7 19	19 8	15 14	7	23	19	19	3 6	10	19	2	7	2	22	20	14	6	33	24	11	6	30	28	23	6	16	28	7	19	12	16					
1 13 5 20	20 16	14	42	mp	20	3 10	16	22	0	6	3	39	22	16	4 21	16	6	20	49	20	13	23	3 14	15	26	6	16	28	7	19	12				
1 17 36 21	21 16	15	12	1	21	21	3 14	16	22	0	6	3	39	22	16	4 21	16	6	42	34	26	6	6	22	17	11	16	61	3	24					
1 21 22 6	22 17	16	53	1 22	22	27	3 16	18	22	4	1	4	17	22	17	6	25	16	22	2	21	20	10	14	61	3	24								
1 25 6 23	23 17	16	28	2 22	23	3	3 22	24	23	5	10	4	23	19	13	6	29	30	23	1	24	21	3	25	6	16	28	7	19	12					
1 28 6 24	24 18	16	3	0 27	24	3	3 24	24	23	6	11	6	35	24	19	6	33	24	11	6	34	25	6	16	28	7	19	12	16						
1 32 36 25	25 9	19 17	40	8	23	3 30	35	25	7	11	6	39	25	16	4 25	19	6	38	13	25	4	42	28	3	18	10	16	61	3	24					
1 36 36 26	26 20	10 18	15	4 26	26	12	3 34	36	26	8	12	0	30	15	18	6	32	26	20	13	6	42	34	26	6	6	22	17	11	16					
1 40 13 27	27 11	12 11	61	6 26	27	23	3 38	49	27	9	13	7	32	26	21	6	46	55	27	6	27	65	55	27	6	16	28	7	19	12					
1 44 1 28	28 12	22 10	27	5 27	27	33	3 42	57	28	10	14	8	11	27	22	6	51	17	28	7	27	38	20	19	16	61	3	24							
1 47 4 29	29 13	23 20	3	6 27	3	37	3 47	52	28	11	14	8	60	28	23	6	66	38	20	8	27	38	20	19	16	61	3	24							
1 61 16 30	30 14	23 20	3	7 28	3	39	3 61	63	20	12	15	6	30	28	24	6	6	0	30	8	30	6	30	8	30	6	30	21							
Sidereal 10 11 12 Aeon 2 3												Sidereal 10 11 12 Aeon 2 3												Sidereal 10 11 12 Aeon 2 3											
Time.			Ω			Time.			Ω			Time.			Ω			Time.			Ω			Time.			Ω								
h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.						
6 26 9	6 14	13	4	10	27	27	6 29	26	8	33	9	6 11	6 24	25	20	24	10	27	22	6	62	12	12	66	11	23	6	16	28	7	19	12			
6 34 50	8 16	15	6	62	28	28	6 41	41	6 13	6 25	26	4 21	6 22	26	11	25	10	28	23	6	63	16	22	67	15	23	6	16	28	7	19	12			
6 39 11	9 17	16	6	15	26	29	8 45	44	9	14	8	26	21	22	27	10	42	24	9	61	25	14	42	14	26	6	16	28	7	19	12				
6 43 31	10 11 12	16	7	67	1	1	8 49	43	10	16	16	9	26	69	23	28	10	43	9	10	10	16	15	18	14	26	6	16	28	7	19	12			
6 47 57	11 11 12	16	7	63	0	13	8 63	60	11	16	16	9	26	69	23	28	10	43	9	10	10	16	17	16	15	26	6	16	28	7	19	12			
6 52 61	12 10	18	2	20	2	8 57	62	12	17	11	23	16	24	25	27	28	10	43	53	11	11	11	16	15	26	6	16	28	7	19	12				
6 66 66	13 12	20	19	8	1 2	9 1	62	17	11	23	16	23	16	24	25	27	28	10	43	53	13	13	13	16	15	26	6	16	28	7	19	12			
7 0 40 14	14 22	19	8	42	3	9	5	63	14	18	12	29	11	22	27	28	10	43	53	11	11	11	16	15	26	6	16	28	7	19	12				
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# TABLES OF HOUSES FOR

Latitude 59° 0' N.

TABLES OF HOUSES FOR

Latitude  $59^{\circ}$  or  $N.$

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3 40 214	3 1 25 11	15 2 25 21	8 2 17	5 34 16 20 12 16	9 41 28 21	6 33 32 13	9 8 20	0 22 21	0 22 21
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3 80 254	3 1 25 11	15 2 25 21	8 2 17	5					









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